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ABSTRACT

At present, NIE, organizationally and in its staff concerns, is primarily oriented to issues as they apply to early learning and primary and secondary education. Currently, the postsecondary activities of NIE are within the Office of Research and Exploratory Studies where a task force on postsecondary education is located. The short-term contract for the present report specified: "considering the time constraints on the project... (1) describe and analyze within a comprehensive conceptual framework the important problems and opportunities in American postsecondary education that are susceptible to significant amelioration or exploitation through research and/or development. (2) specify appropriate research and development strategies by which NIE might respond to these problems and opportunities, relating such strategies to existing R&D, providing cost estimates and, where appropriate, alternative strategies." The principle approaches used in preparing the report were consultation with informed persons concerned with postsecondary education research and the review of relevant literature, documents, and reports. The document includes: introduction; the setting; organizations concerned with postsecondary research and development; selected issues for the NIE postsecondary research program; methods of implementing the NIE postsecondary program; the program, budget and staff; and appendix A to F. (Author/KE)

ED107197

A PROPOSED

NATIONAL INSTITUTE OF EDUCATION
POSTSECONDARY EDUCATION PROGRAM

Contract No. NE-C-00-3-0124

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NE 006 600

by

JOHN C. HONEY
SYRACUSE UNIVERSITY

September 1973

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SYRACUSE UNIVERSITY

DEPARTMENT OF HIGHER EDUCATION

SYRACUSE, NEW YORK 13210

September 28, 1973

Dr. Thomas K. Glennan
Director
National Institute of
Education
Washington, D. C.

Dear Dr. Glennon:

Accompanying this letter is my report on the proposed NIE post-secondary education research and development program. The task I have undertaken during the past four months has been to identify the important problem areas in American postsecondary education which might usefully be addressed through research and development and to propose appropriate strategies for launching a postsecondary program. Essentially, this effort has been carried out through a substantial number of interviews with knowledgeable persons in Washington and elsewhere, and through review, insofar as time permitted, of the research literature, NIE planning documents and other relevant reports and studies.

Several points may be useful to note in reviewing the report:

First, planning and developing a postsecondary program in NIE is radically different from the work of any of the other task forces in the Office of Research and Exploratory Studies. The others are dealing with an issue or an activity within a level of the educational system, e.g., finance or governance. It has been possible for at least some of the task forces readily to identify and rank the most important problems and

to seek the cooperation of that limited number of leading scholars who can work on those problems. Because of its scope and complexity, such is not the case with postsecondary education.

In postsecondary education we are addressing one major level of education with all of the issues and problems, substantive and managerial, cultural, economic and political which attend that level. No other level of education is so much the center of interest of virtually every citizen who aspires to a productive, self-fulfilling life. No other level is so central to meeting our society's needs for a great cadre of highly educated men and women. We are concerned with a national investment of $30 billion and with more than 13,000 institutions as varied as Stanford University, SUNY-Binghamton, Antioch, the Finger Lakes Community College and the proprietary schools. Millions of students and hundreds of thousands of faculty are involved in the postsecondary education enterprise. A very large number of ad hoc and ongoing research efforts are devoted to the problems of postsecondary education.

To identify significant research needs and interests and to develop appropriate strategies for mounting a research program for all of postsecondary education, as well as a research coordination and dissemination effort, requires continuing consultation with a great many permanent organizations, temporary groups, and individuals.

Second, I am mindful of your desire to have the NIE make important contributions to the design and direction of the research activities which it supports since it can command a very broad perspective on the

educational scene. The proposals in the report reflect this important objective. I should underscore, however, that in such an immense arena as postsecondary education, the NIE staff, which will inevitably be modest in size, must augment its own insights through widespread use of ad hoc panels and study and review groups drawn from the larger intellectual community.

Third, there is an understandable desire on the part of the NIE senior staff to "get on with the job" and to stop planning — to conduct and support research. A good deal of planning has already been done for and by NIE although little has borne directly on postsecondary education. As a result of discussions with some NIE staff as well as others, I have added in an Appendix E a brief agenda of "immediate action" items. These are not inconsistent with the longer-term program which is proposed; indeed, they are complementary and supportive of it.

I should make clear, however, that these "immediate action" items will not permit NIE to spend large amounts of resources in a responsible manner. They can, for the most part, be negotiated quickly and can absorb modest funds. But the expenditure of as much as six million dollars in the postsecondary area (a figure given in your August 6th memorandum to the Council) will require the work of a carefully recruited, talented, and broad-gauged staff.

I have paid particular attention to the qualifications of a director, at least as envisioned under a program of the general type proposed. Recruitment will, I believe, be much more feasible if it is possible to

talk with reasonable certainty about the nature of the program and the capabilities which are called for in directing such a program.

In preparing this report I have had the able assistance of two graduate students at Syracuse University, David Chapman and Paul Krusa.

Should you desire to discuss the report with me, I will be happy to do so. It has been a source of satisfaction to work with you and your many competent colleagues on this important subject.

With good wishes, I am

Sincerely,

John C. Honey

John C. Honey
Chairman
Dept. of Higher Education and
Professor of Political Science

JCH:JG
Attach.

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I. INTRODUCTION

Background

The Higher Education Amendments of 1972, which created NIE, provided that the whole spectrum of education would come within its purview. There had been earlier expectations that a national foundation, to be created simultaneously with NIE, would have responsibility for postsecondary education research and development as well as for the support of applications and experimental programs. The 1972 Amendments provided for a Fund for the Improvement of Post-Secondary Education with responsibility for assisting in reforming that level of education through the support of innovations and experiments and the creation of new institutions. Research and development in postsecondary education remain a responsibility of NIE.

As the organization of NIE emerged during the first year of its existence (August 1, 1972, to August 1973) it reflected a combination of inputs: the Rand Corporation's Levien Report;[1] views drawn from a number of commissioned planning, strategy and "idea" papers;[2] and the needs dictated by the programs taken over from the Office of Education, particularly the lab-center programs.

The documents referred to above were replete with ideas for NIE, some of broad relevance to postsecondary education. A few specific postsecondary approaches were discussed, e.g., "the unbundling of higher education."

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[1] National Institute of Education: Preliminary Plan for the Proposed Institute, Roger E. Levien, Study Director, R-657-HEW, February 1971.

[2] NIE Planning Reports No. P. 101-105 and the Stanford Research Institute, EPRC Research Note 16.

By and large, however, these reports, the interests of the staff assembled during the first year, and the ongoing commitments from OE tended more to emphasize issues, problems and approaches focused on education below the postsecondary level. Thus, at present, NIE, organizationally and in its staff concerns, is primarily oriented to issues as they apply to early learning and primary and secondary education.

Currently, the postsecondary activities of NIE are within the Office of Research and Exploratory Studies where a task force on postsecondary education is located. It is staffed by one permanent employee who was formerly in OE and who has responsibility for the lab-center and facilities programs.

The short-term contract for the present report (May 19 - August 31, 1973, subsequently extended to September 30, 1973) specified:

". . . considering the time constraints of the project - - -

(1) describe and analyze within a comprehensive conceptual framework the important problems and opportunities in American postsecondary education that are susceptible to significant amelioration or exploitation through research and/or development

(2) specify appropriate research and development strategies by which NIE might respond to these problems and opportunities, relating such strategies to existing R&D, and providing cost estimates and, where appropriate, alternative strategies."

Methods and Definitions

Given the limitations of time and resources, the principal approaches used in preparing the report were consultation with informed persons concerned with postsecondary education research and the review of relevant

literature, documents and reports.

Approximately 100 persons were consulted, primarily in the Washington-New York area. These included government officials in NIE, the U. S. Office of Education and elsewhere, as well as personnel in the educational associations, the private foundations, and various research institutions and study groups. Discussions were held with a number of individuals in academic positions, but coverage of the academic community was limited.[1]

The Congressional hearings relating to NIE, and the various NIE planning documents were reviewed as well as a substantial number of other documents and reports.[2] The literature on research in postsecondary education was also examined to the extent that time permitted.[3]

In the preparation of the report the following views were kept in mind: that NIE is a permanent organization with a long-term responsibility for postsecondary research; that coordination of research and development and the dissemination of the results is a responsibility of the postsecondary program; and that the training of research personnel is also an appropriate concern.

The definition of postsecondary education used in the report is that adopted by the National Commission on the Financing of Postsecondary

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[1]See Appendix A for a list of the individuals consulted in preparing this report.

[2]See Appendix B for a discussion of Methodological Issues and Current Priorities of Research on Postsecondary Education.

[3]See Appendix C for Bibliography.

Education as its working definition for basic analytical purposes:

> "Postsecondary education consists of formal instruction, research, public service, and other learning opportunities offered by educational institutions that primarily serve persons who have completed secondary education or who are beyond the compulsory school attendance age and are accredited by agencies officially recognized for that purpose by the U. S. Office of Education or are otherwise eligible to participate in federal programs."

The definition of basic research used in this report is drawn from "Science Indicators, 1972," Report of the National Science Board, 1973, National Science Foundation, Washington, D. C.:

> "Basic research is that portion of the total R & D effort whose primary aim is extending the fundamental understanding of man and nature . . . . Basic science, moreover, provides a pool of knowledge and understanding which helps in determining the most efficient strategy for applied research and development, and also serves as a source of ideas for new applications and for attacking social problems as well . . . ." (p. 33)

As the term NIE Postsecondary Program is used in the report it refers to the total program including research and development, coordination and dissemination of R & D and training of research personnel for postsecondary research.

II. THE SETTING

Historical Perspective

American society is arriving at a view that postsecondary education involves life-long learning opportunities beyond the secondary level. It is further rather widely persuaded that such opportunities should be available to all interested citizens. Inevitably there is not unanimity in those views. Some powerful voices still believe that earlier respected concepts of higher education are the ones which should dominate the educational scene. Since we are currently in the midst of a conceptual revolution in this arena (typified by the admission of proprietary educational institutions into the fold of those which may receive public support) there is bound to be uncertainty as to where we may be heading in the decades ahead.

The historical course through which we have come to our present situation is well enough known to call for only brief recapitulation. The great universities of England, Oxford and Cambridge were basically the inspiration for our first institutions of higher education. Beginning with Harvard's founding in 1636, the early colleges were created, largely as private institutions, to educate for the professions of law, theology and medicine. These were the fields of endeavor into which the sons of the nation's leaders could move. The students of the Colonial and post-Colonial period came largely from that strata of society which represented basically the American aristocracy. To this day, education in the elite colleges and universities of the Eastern seaboard, many of which were established in those early years, is seen as signalling or bestowing a special advantage.

The impact on the educational scene of the rising populism of the first half of the 19th Century was not felt so much in higher education as at lower levels. Universal schooling became the aspiration. De Tocqueville wrote in the 1830's, "I do not believe that there is a country in the world where, in proportion to the population, there are so few ignorant and at the same time so few learned individuals. Primary instruction is within the reach of everybody, superior instruction is scarcely to be obtained by any."

That situation began dramatically to change with the passage of the Morrill Act in 1862 creating the land grant institutions with their emphasis on the agricultural and mechanical arts. By the early 1900's the structure of American higher education was opening up to provide for the preparation of a much wider range of professionals such as engineers, teachers, and scholars in the disciplines. Many of the land grant colleges were available to any high school graduate of the state and "open admissions" became a reality, at least for those portions of the population who were culturally and financially in a position to participate.

The evolution of American universities toward great scholarly research centers received much impetus at this period from contacts with German science and advanced education. In a sense this led to a reestablishment of the elite tradition of an earlier time. State universities such as Michigan and Wisconsin, in emphasizing research and research faculties, began to approach the excellence of the leading Eastern universities. When, in the 1950's, Soviet science challenged America's presumed preeminence, and the National Science Foundation poured dollars into higher education to strengthen

basic research and teaching in the sciences, the elite research institutions found affirmation of their special status in government policy.

But the inherently egalitarian nature of American government and society was also inducing response to other pressures at this time. The Supreme Court issued its one-man, one-vote decree; it ordered the abolition of segregation in all educational institutions. Federal money for science and many other purposes went into not only the first-rank institutions but to many that were "developing" as well. Old normal schools which had become teachers colleges found themselves transformed into state university colleges and full-fledged universities. Junior and community colleges sprang up in profusion. It became increasingly difficult for the casual observer to distinguish between the elite and the non-elite among institutions of higher education. Only one thing remained certain and that was the persistent yearning among a very substantial part of this profusion to emulate "the best" — to become a part of the elite establishment.

Under the rubrics of aiding science and the national security, Federal funds became available to advanced students in the late 1950's. By the mid-sixties, all kinds of specialized higher education were being assisted either through aid to students or through grants for curriculum development, research, the construction of physical facilities, or through general support. Coincidentally with these developments, the economically and culturally disenfranchised portions of the population, which for the most part had access to secondary education, saw in higher education an opportunity to escape to a better life.

The Higher Education Amendments of 1972 are in many respects the American public's judgment, through its governmental spokesmen, as to what must be done next in postsecondary education. This bill, sometimes called the most important measure on advanced education since the Morrill Acts, is certainly the prelude to a new and radically different era. It makes an unequivocal commitment to the egalitarian goal of postsecondary educational opportunities for all; it places primary reliance on funding through students, and thus on student choice, to determine much about the future character of postsecondary education. It embraces proprietory schools within the fold of acknowledged postsecondary institutions. It provides special support for the "reform, innovation and improvement" of postsecondary education. Through the NIE it commits substantial resources to research on all levels and issues of education.

Current Dimensions

The postsecondary sector is presently estimated to be comprised of 13,486 institutions of which 2,686 are collegiate and 10,800 are non-collegiate. There are 26.8 million students involved, in total, of whom 9.2 million are studying for credit in collegiate institutions and six million for non-credit in such institutions. In the non-collegiate institutions, 1.6 million are studying for credit; 10 million for non-credit.[1]

The 2,686 collegiate institutions are made up of 327 doctoral granting universities and colleges; 442 colleges also granting Master's degrees;

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[1]Estimates made by staff of National Commission on Financing of Post-Secondary Education.

78 institutions granting first professional degrees; 765 four- and five-year colleges; and 970 junior and community two-year colleges.[1] Approximately 45% of the collegiate institutions are public and 55% private. However, of the students in collegiate education, 75% attend public institutions.

The non-collegiate or vocational/technical/proprietary sector consists of approximately 1,800 technical and vocational schools; 1,700 business and secretarial schools; 2,500 cosmetology schools; 1,750 flight schools, 1,000 trade schools; 1,500 correspondence schools; 1,500 hospitals; and 400 others.[2]

The total income of post-secondary education at present amounts to about $30 billions. Of this sum, state and local governments provide 31%; the Federal government 28%; students and parents 21%; auxiliary enterprises 15%; and philanthropic and endowment income 5%.[3]

Themes Shaping Postsecondary Education

Three themes, with threads in the past, are certain to be significant in shaping the future of postsecondary education.

The first is that institutions of higher education are virtually the sole source of the highly educated required to operate a complex industrial

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[1] U. S. Department of HEW, Office of Education, Education Directory, Higher Education, 1972-73 (Washington, D.C., GPO, 1972).

[2] U. S. Office of Education, preliminary data for Vocational Education Directory Survey, 1970-71.

[3] Staff preliminary calculations, National Commission on the Financing of Post-Secondary Education.

society. They are also a major source of the new knowledge which is so essential to the continued development of the society and the adjustment of the human species. Consequently, a special imperative exists for governments to be concerned with the well-being of institutions of higher education.

The second theme, which has received particular note in recent years, is that postsecondary education is an enormously important route to self-fultillment and one which should not be available only to the privileged. The impact is widely felt in the efforts to provide financial assistance to the disadvantaged; to expand the range of acknowledge postsecondary experiences, and to open up new, flexible modes of learning. Our understanding is growing of the stultification which may result from badly conceived educational experiences. We are recognizing that the arts and the humanities are vital contributors to self-relization. We are beginning to see that in preparation for satisfactory working lives, such as intimate aspect of "self-fulfillment" has been poorly attended in terms of providing reliable knowledge of work opportunities and of the requisite skills. We will undoubtedly seek to perfect, in the years ahead, the conccept of self-fulfillment through postsecondary education.

The third theme, only now gradually emerging, is that the quality of life in America, and by extension in the world at large, must be addressed by society and should be a concern in postsecondary education. In recent years substantial numbers of young people have turned to the "helping professions" -- law, education, social work, the health fields -- as a means

of contributing to the quality of life. Attention to environmental conditions has led to a vast array of new legislation, to new research, new educational opportunities and new careers. The recent seminal report on "Work in America," prepared by a federally appointed task force, reveals the dull, non-creative quality of much employment in industrial America and hints at some of the ways in which such conditions may be ameliorated. A Panel on Youth of the President's Science Advisory Committee has recently published a study on "Youth: Transition to Adulthood," which suggests that young people want and need to be given opportunities to engage in meaningful employment as they move through their formal education. The response to government internships, to the Peace Corps and to the Action agencies all indicate an interest on the part of young Americans in employment with a public service purpose. It now seems probable that a theme which may permeate postsecondary education in the future will be that of aiding the individual to fulfill himself through preparing for a socially useful working life.

III. ORGANIZATIONS CONCERNED WITH POSTSECONDARY RESEARCH AND DEVELOPMENT

Postsecondary education has moved to the forefront of national attention in recent years. As a result, many organizations, public and private, are involved in examining various aspects of it. In the following pages those institutions are discussed which are presently concerned with postsecondary educational research and training, with the collection and dissemination of such research, and with policy development related to these matters.

Basically, two purposes underlie this review. First, it is essential to know the nature of relevant current endeavors if a realistic, nonduplicatory program is to be formulated for the NIE in postsecondary research. Second, as the staff which is currently being recruited for the program begins its work, it should have a reasonably definitive picture of the significant activities with which it must maintain contacts.

While the desire has been to achieve completeness, because of the extensiveness of the field, a number of omissions have occurred. In some instances, time has not permitted either personal interviews or an examination of pertinent reports and documents. Where possible, relevant activities have been noted and briefly described, and in some cases the individuals who are the chief points of contact are indicated.

A. NIE

The National Council on Educational Research: The Council's responsibilities, among others, under the NIE Act are to establish general policies for, and review the conduct of, the Institute and to advise on

development of programs to be carried out by the Institute. The Council's role and mode of operations, in detail, are still being formulated. It appears probable, however, that it will, at the very least, determine the overall dollar dimensions of the postsecondary education program. It may also wish to review the major issues, and the modes of approach to dealing with those issues, which the Director proposes.

The Office of the Director, with advice from staff and consultants, will determine the nature of the postsecondary education program and staff, and will make recommendations to the Council on dollar dimensions and major program emphases. The Office of Planning and Management will assist in this effort. The Office of Administration will assist in the execution of agreed-upon programs.

The Office of Research Grants, formerly the Office of Field Initiated Studies, in FY 1973 made 206 awards to researchers in elementary, secondary, and higher education with a dollar volume totalling approximately $11 million. The awards were to individuals in universities, professional associations, private research centers and public school systems.

Since this grant program offered the major governmental opportunity for researchers in education to have their ideas and interests supported, the response to it was very large (approximately 3,400 proposals were received). An analysis of the proposals related to postsecondary education would presumably suggest rather definitively the nature of the issues

which the scholarly research community feels are important to pursue. Such information would represent an important addition to the evidence generated on research issues during the preparation of the present report.

The Office of Research and Exploratory Studies has several task forces as follows: Bilingual, Curriculum and Instruction, Early Learning, Education Personnel, Methodology, Finance, Technology, Governance and Organization, and Post-Secondary Education. Conversations with four of the task force directors (Education Personnel, Finance, Technology, and Governance and Organization) indicate that for the most part the emphasis in their programs, at least initially, will be on primary-secondary education. Clearly, however, the areas of their task forces' concerns could, and in some cases do, extend to postsecondary education (e.g., technology). The postsecondary program proposed below takes account of this situation. Continuous liaison is required between the postsecondary education program and the activities of these task forces to assure adequate coverage and non-duplication, especially in those areas when there may be close inter-connections, e.g., technology, methodology, curriculum and the development of education personnel.

The main responsibility of the postsecondary task force has been to maintain liaison with the laboratory and university-based center

programs dealing with higher education research and development which were transferred to NIE from the Office of Education. Following their transfer, they were reviewed by special panels and various changes in their status and support have resulted. The level of support for these programs in FY 1973 was approximately $3 million.[1]

The programs are as follows:

1. Center for the Advanced Study of Educational Administration, University of Oregon. Aspects of the research of this center related to higher education, but this appears not to be the case at present.

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[1] The reports of the review panels are available in NIE.

See also "Research and Development Centers: An Assessment," Journal of Research and Development in Education, Vol. 1, No. 4, Summer 1968, College of Education, University of Georgia, Athens, Ga. 30601.

"Regional Educational Laboratories: Agents of Change," Journal of Research and Development in Education, Vol. 3, No. 2, Winter 1970. College of Education, University of Georgia, Athens, Ga. 30601.

"The Productivity of Undermanaged Research: Five Years of the Harvard R & D Center," Herzog, John D., Journal of Research and Development in Education, Summer 1972. College of Education, University of Georgia, Athens, Ga. 30601.

"The Impact of Educational R & D Center and Laboratories: An Analysis of Effective Organizational Strategies," Baldridge, J. Victor; and Johnson. Rudolph, Stanford University, May 15, 1972.

"The Relationship of Research and Development Efforts to Field Users: Problems, Myths and Strategies," Baldridge, Deal, Johnson and Wheeler, Stanford University, 1973.

2. The Stanford Center for Research and Development in Teaching, Stanford University. A number of the projects carried on at this center relate directly to higher education.

3. Center for the Study of Evaluation - U.C.L.A. This center is being phased out.

4. The Center for Research and Development in Higher Education, University of California, Berkeley. While several aspects of this Center's work are being phased out, it will continue to pursue some studies related to state governance of postsecondary education.

5. The National Laboratory for Higher Education, Durham, North Carolina, has been concerned with governance in community and junior colleges and black colleges. It will continue to work on these matters.

6. The National Center for Higher Education Management Systems (NCHEMS) of the Western Interstate Commission on Higher Education (WICHE), Boulder, will continue its research into the development of accounting systems for institutions of higher education. It will also continue its research into the identification and uses of higher education outcomes information.[1]

The Office of Programmatic Research and Development has two programs in being: Career Education and Experimental Schools. The Career Education

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[1] See, for example, "Higher Education Program Assessment Profiles," a preliminary draft, Wallhaus, Robert A., and Micek, Sidney S., WICHE, August '72; "Outcome-Oriented Planning in Higher Education: An Approach or an Impossibility?" Micek, Sidney S., and Arney, William Ray, NCHEMS, WICHE, June '73; "An Introduction to the Identification and Uses of Higher Education Outcome Information," Technical Report 40, NCHEMS, WICHE, 1973.

program, in particular, has many interrelationships with postsecondary education. For example, the April 1973 "Forward Plan for Career Education Research and Development" contains, as Item 3 a. of B. New Activities (pp. E5-14), the following:

> "Development of programs related to the roles and functions of post-secondary institutions in extending educational and career opportunities:
>
> "Community colleges, proprietary schools, continuing education programs and 4-year colleges have been expanding rapidly in the last decade. Course credits and credentialing systems remain much the same, however. Many issues require careful study as post-secondary institutions shoulder their responsibilities in the career education system. Career education should not contribute to the deterioration of academic standards as feared by some educators, and the consequences of ideas like open enrollment programs ought to be examined critically."

Thus close liaison in the ongoing development of the postsecondary program and the implementation of the career education program will be required.

The Office of R & D Resources includes units concerned with Planning and Analysis, Dissemination and R & D Personnel. It is clear that both the coordination and dissemination of research results and the development of able researchers to study educational issues are not only central to the interests of this office but of the postsecondary program as well. A staff position is recommended in Chapter VI to develop effective coordination and dissemination activities in postsecondary education. Close working relationships will need to be maintained by this individual with the Office of R & D Resources.

Second, as a strategy for assuring the continuing development of capable investigators concerned with research and development in post-secondary education, the proposed program provides for graduate assistants to be associated with virtually every aspect of it. Whether other strategies will also need to be pursued, e.g., special fellowship or traineeship programs, should be the subject of exploration between the postsecondary program and this office in the future.

B. The Congress

There are fifteen committees, subcommittees or special or select committees concerned with legislative and appropriations responsibilities affecting postsecondary education.

The Chronicle of Higher Education, Vol. VII, No. 25, March 26, 1973, gives a summary of the functions of these committees, the names of their majority and minority members and of their principal staff officers.

Of particular importance is the Select Subcommittee on Education, chaired by Congressman John Brademas, whose jurisdiction is NIE and the arts and humanities.

There are twelve committees and subcommittees of the Senate with legislative and appropriations responsibilities affecting postsecondary education.

The Chronicle of Higher Education, Vol. VII, No. 24, March 19, 1973, gives a summary of the functions of these committees, the names of their majority and minority members and of their principal staff officers.

The Subcommittee on Education, the Chairman of which is Senator Claiborne Pell, has jurisdiction over higher education, and thus is of particular importance.

G. The Department of Health, Education, and Welfare

The NIE legislation provides that: "The Director . . . shall perform such duties and exercise such powers and authorities as the Council, subject to the general supervision of the Assistant Secretary (of HEW for Education) may prescribe. The Director shall be responsible to the Assistant Secretary and shall report to the Secretary through the Assistant Secretary . . . ." Thus the NIE is subject to broad policy guidance from the Department.

Within the Office of the Assistant Secretary for Education is a Deputy for Policy Development whose staff is concerned, in part, with broad issues related to postsecondary education. How the concerns of the Assistant Secretary and his staff may be reflected in the NIE program is as yet unclear, given the newness of both activities.

The Assistant Secretary for Planning and Evaluation has a deputy concerned with higher education planning. The Second Newman Task Force, discussed subsequently, is attached administratively to this office. Broad policy guidance to the Assistant Secretary and Secretary on higher education planning derive from these quarters.

The U. S. Office of Education transferred to NIE a substantial part of its research after NIE was established in 1972. However, four areas of

research or research-related activities remain in OE. Two are required by law to do so: research and development in vocational education, located in the Bureau of Occupational and Adult Education, and research on education of the handicapped. Monies for vocational education research fall in three areas: Part C of the Vocational Education Act of 1973 provides $18 million for research. Nine million dollars of this is distributed to the states where it can be used to support research coordinating units (up to 75% of cost) or to support projects (up to 90% of cost). The remaining $9 million is available for "new starts". Over the last year almost all of the $18 million was directed to career education.

Part D of the '73 Act provided $16 million in 1973 for demonstrations. Half of this sum is distributed to the states. States have full discretion over its use. The other $8 million is discretionary and has been used to support three-year demonstration projects. Part I money is directed to curriculum development; in 1973 it totaled $4 million. This money, dispersed through competitive contracts, has been directed to training of curriculum developers and curriculum development. Also within the Bureau of Occupational and Adult Education $7 million in FY 1973 was provided for special demonstration projects in Adult Education and [illegible] million for training.

The Office of Planning, Budgeting and Evaluation has several units relevant to postsecondary education. The Division of Vocational and Handicapped Education engages in evaluation and research on a contract basis. The Division of Higher Education is the counterpart unit in higher education. The pattern in both these units is that evaluation and research

project; are contracted out to private organizations or individuals.

The Higher Education General Information Survey (HEGIS), the post-secondary statistical data-gathering arm of the National Center for Education Statistics, is located in the Office of Education.

The Fund for the Improvement of Post-Secondary Education was established by the Higher Education Amendments of 1972 to improve postsecondary education through making grants and contracts for the purposes of:

"(1) Encouraging the reform, innovation, and improvement of post-secondary education, and providing equal educational opportunity for all;

"(2) the creation of institutions and programs involving new paths to career and professional training, and new combinations of academic and experimental learning;

"(3) the establishment of institutions and programs based on the technology of communications;

"(4) the carrying out in post-secondary educational institutions of changes in internal structure and operations designed to clarify institutional priorities and purposes;

"(5) the design and introduction of cost-effectiveness methods of instruction and operation;

"(6) the introduction of institutional reforms designed to expand individual opportunities for entering and re-entering institutions and pursuing programs of study tailored to individual needs;

"(7) the introduction of reforms in graduate education, in the structure of academic professions, and in the recruitment and retention of faculties; and

"(8) the creation of new institutions and programs for examining and awarding credentials to individuals, and the introduction of reforms in current institutional practices related thereto."

In FY '73, the Fund awarded $9.3 million in 89 grants, out of a total of 1,400 applications, according to The Chronicle of Higher Education (July 30, 1973) which listed the grants that had been made. The emphasis in these awards was on non-traditional approaches to postsecondary education. Nearly half of the funded projects involve experimenting with ways of delivering instruction to such groups as housewives, prison inmates, people in rural areas, and inner-city minorities who do not have access to college. About a quarter are to develop means to assess and give credit for specific competencies not acquired in the classroom; another quarter are concerned with the development of cooperative relationships among educational institutions.

Examination of the list of projects strongly suggests that the Fund has moved in the direction of action, experimentation and implementation rather than toward research. This is apparently as intended in the legislation; it leaves the R & D responsibility in the hands of NIE. However, the close relationships between the Fund's activities and those of the NIE in the postsecondary area are suggested by comparing the Fund's grants and the proposed areas of R & D activity as set forth subsequently in this report. It is clear that close and cooperative relationships must exist between the two agencies with the NIE concentrating on research and development and the Fund on "action" programs. At the points of overlapping

interest, the NIE may support antecedent and background research before a Fund project moves into action. The NIE may also support evaluative research on the outcomes of selected Fund projects.

National Institutes of Health and National Institute of Mental Health. While time has not permitted discussions with personnel of these organizations, several points should be noted with respect to them and possible future relationships with NIE. First is the fact that both NIH in its several units and NIMH have established excellent working relationships with the intellectual community across the nation. NIE can undoubtedly profit from discussions with personnel of NIH and NIMH as to approaches which they have found particularly effective in their research, training, and grant-making activities. Second, NIMH has supported significant research in basic learning theory and this is of importance to all levels of education, to educational research and to the design of ongoing research efforts related to learning theory. Third, in selected substantive areas there may be common interests between NIH and NIE, as, for example, in the health-related professions and paraprofessions where many parts of universities, outside of the medical schools, as well as vocational, proprietory and two-year institutions may be involved.

D. The National Science Foundation

The NSF has supported a variety of programs related to postsecondary education in the sciences for approximately twenty years. This has involved the support of research in the scientific disciplines; the upgrading or

development of science facilities and research and teaching capabilities in varieties of postsecondary educational institutions; the identification of significant research needs and opportunities; and the applications of research findings to important socio-cultural problems. The NSF, like NIH and its constituents, has developed excellent working relationships with the intellectual community.

The newly appointed Assistant Director for Education of NSF, Dr. Lowell J. Paige, will undoubtedly be evaluating NSF's programs which relate to higher and post-secondary education. A task force on NSF's relationships to higher education has been at work. A unit of the science education program concerned with "problem assessment" has been making or supporting a number of in-depth studies, for example, on women in science and on barriers to implementing strengthened science programs. Substantial funds are being devoted to the development of science in black postsecondary institutions.

It is apparent that the NIE postsecondary staff will have many points of common program interest with NSF. There will also be substantial instructive experience to draw on from NSF's many successful years of operation.

E. The National Foundation in the Arts and the Humanities

The Foundation was created in 1965 by the Congress. It consists of two agencies: the National Endowment for the Humanities and the National Endowment for the Arts. Both endowments support scholars in universities, provide assistance to graduate students and undertake the strengthening and

development of the nation's artistic and cultural resources. The Foundation is thus important not only to conventional higher education but also to the larger concept of postsecondary education with lifelong learning opportunities as a goal.

As with the National Science Foundation, this Foundation has developed effective working relationships with the intellectual community and can be a valuable resource for the NIE as it moves ahead with the development of its new programs.

F. The Federal Interagency Committee on Education (FICE)

FICE was established in 1964 by Presidential order to coordinate educational activities of Federal agencies. FICE is chaired by the HEW Assistant Secretary for Education. Twenty-six agencies are now members, including NIE. FICE functions through a series of subcommittees and study groups. These various groups make recommendations to the full committee on administrative policies and practices. They also authorize studies and undertake research.

The subcommittees and task forces currently in operation deal with the following subjects: graduate education, educational definitions and classifications, educational statistics, career education, minority education, arts and education, educational consumer protection, environmental education, and credit transfer among academic institutions. FICE also seeks to address a number of immediate issues such as drug abuse education and education of the Vietnam-era veteran.

G. Other Departments and Agencies of the Federal Government

In FY 1972 all departments and agencies of the Federal government expended more than $8 billion in postsecondary institutions. Half of this came from the Department of Health, Education, and Welfare including the U. S. Office of Education. The Veterans Administration accounted for $1,766 million, or about 22% of the total. DOD expended 7.5% of the $8 billion; the Department of Labor 5.4%; and NSF 4.7%. Other agencies accounted for the remaining 10%.

The National Commission on the Financing of Postsecondary Education has categorized the purposes of the 375 programs through which the Federal outlay of $8 billion is expended. These include: 1) student access; 2) equalizing opportunity; 3) institutional autonomy; 4) program diversity; 5) manpower demand; 6) knowledge stock (research: basic, applied, and developmental); 7) cultural stock; 8) efficient use of resources; and 9) other.

As one reviews this categorization and compares it with the issues for an NIE research and development program, as discussed in IV below, it is clear that NIE must consult widely among Federal agencies in order to assure that its programs are not inappropriately duplicatory of efforts supported by other Federal agencies. It also seems probable that much work is already under way in postsecondary research and development which can be complementary to NIE's activities.

H. Quasi-Public Institutions

The National Research Council houses two organizations, both of

which are concerned with higher and postsecondary education, the National Board on Graduate Education and the Board on Human Resources.

The National Board on Graduate Education was created in 1971 by the Conference Board of Associated Research Councils (composed of the ACE, the S.S.R.C., the A.C.L.S. and the N.R.C.) "to provide a means for an unbiased, thorough analysis of graduate education today and of its relation to American society in the future." To quote from the Board's initial report (November, 1972):

> "The Board . . . is an autonomous body of twenty-six persons from the public and private sectors, chosen for their knowledge and interest in graduate education. Members were selected . . . . to serve as individuals rather than as representatives of constituencies . . . during its life, the Board will focus primarily upon doctoral level education in the humanities; social, biological, and natural sciences; and engineering. (Professional fields such as law, medicine, and business administration are not included in the Board's activities.) Although major attention will be given to the doctoral degree, the Board's concern with graduate education will encompass advanced education from the bachelor's to the post-doctoral level, as well as new degrees, such as the Doctor of Arts."

The Board's interests are being pursued through research; encouragement of experimentation and innovation; coordination and dissemination of research results; preparation of an annotated bibliography (the first edition of which, "An Annotated Bibliography on Graduate Education, 1971-1972," was published in Oct. '72); and other activities.

The Board has identified the following current issues as being of particular concern:[1]

[1]These issues are paralled in a number of respects by the issues identified in Chap. IV below as being the substance of an NIE postsecondary research program. As is suggested subsequently, when there is need to address a particular issue in its graduate education aspects, this could be done through considering the issue in its relationship to all of postsecondary education or separately, as a problem of graduate education.

a. The labor market for Ph.D.'s

b. The rising costs and the financing of graduate education

c. The geographic and qualitative dispersion of graduate education

d. Program effectiveness and relevance

e. The relationship of graduate to undergraduate education

f. Problems of access and recruitment for minority members and women

g. Initiative and conformity in graduate education

h. Alternative models of graduate education

i. New graduate degrees

j. Interdisciplinary graduate programs

k. Review of the Master's degree

l. Graduate programs in black institutions

The Board currently has under way a study on the financing of graduate education; it is undertaking an evaluative study of the NSF's Science Development Program; it has recently prepared a critique of the Second Newman Report on Graduate Education. It appears that the Board represents an important resource for investigations into issues and problems surrounding graduate education, and as such will be an organization with which the NIE postsecondary program will wish to maintain close relationships. Dr. David Henry, former President of the University of Illinois, is Chairman of the Board. Dr. David H. Breneman is Staff Director.

The Board on Human Resources was established by the National Academy of Sciences in 1971 within the National Research Council. The Board's function is to focus on the processes by which the nation educates and utilizes its talent, to conduct a limited number of studies, to evaluate other studies and reports, and to propose and stimulate needed investigations.

The Board has identified several areas of inquiry for its agenda, as follows:

a. The social and economic returns to investment in education

b. Occupational transitions at mid-career

c. Trends and indicators of trends in the human resource domain

d. Mechanisms for shorter periods of formal education (the three-year baccalaureate program, two-year programs, in-and-out)

e. Formalisms (credentialism, specialization, professionalization) and their effects (dead-ends, underutilization, etc.)

The Board has established a Panel on the Benefits of Higher Education which sponsored a conference in the summer of 1972. The conference explored the extent to which private returns to education vary with family background, mental ability and school quality. It also inquired into the relationship between various levels of government and the student in meeting the costs of higher education. It is planning further conferences and a "yearbook" summarizing the results of educational-benefit studies

for policymakers. The Board also has established a Panel on Career Choice.

The Chairman of the Board is Dr. Robert W. Morse, Director of Research, Woods Hole Oceanographic Institution. The Staff Director is Dr. Lewis C. Solmon.

I. State Organizations Concerned with Postsecondary Education

Government organizations within the fifty states concerned with the planning, development and governance of postsecondary education are frequently the sources of important data and investigations. The New York State Department of Education, for example, has served as the research staff to several significant commissions concerned with higher education in recent years, including among others, the Fleming Commission on graduate education and the Keppel Commission on financing and governance of postsecondary education. It has not been possible, during the present study, to have conversations with more than a very limited number of persons with special interests in the role of the states and their research contributions to postsecondary education.

The Education Commission of the States was founded in 1966 to serve as a voice for the states in dealing with the federal government on all levels of education. The ECS serves as a clearinghouse of state legislative information and assists the states in developing assessment and evaluation programs. It publishes the ECS Legislative Review and Higher Education in the States. The latter publication summarizes major postsecondary legislative proposals in the states, reports higher education

bills enacted and includes status reports on important issues in higher education.

During 1971 the ECS sponsored several major studies in higher education. They included: "Post-Secondary Educational Opportunity: A Federal-State-Institutional Partnership," by the Task Force on Student Assistance; "Comprehensive Planning for Post-Secondary Education," by the Task Force on State Planning; "Community and Junior Colleges in Perspective," by the Task Force on Community and Junior Colleges, and "The Faculty Work Load—Alternative Methods of Evaluation," by Robert L. Williams. ECS also sponsored a conference on student unrest and several reports on student residency. It has developed an active Task Force on Administrative Structure and Governance of postsecondary education. Dr. Richard Millard is Director of Higher Education Services of ECS.

J. Urban Higher-Postsecondary Planning and Administrative Bodies

Time has not permitted an examination of the research and related activities of such bodies.

K. Regional Associations

A number of associations are concerned with representing the interests of regionally related colleges and universities. The Midwestern College Office serves as spokesman for a number of private liberal arts colleges in the central states. It is located at the National Center for Higher Education in Washington, D. C. The Center for Institutional Cooperation in Evanston, Illinois, representing the "big ten" state universities of the Mid-West and the University of Chicago, is concerned

with the encouragement of institutional cooperation among its members.

The Southern Regional Education Board (SREB) is an agency created by interstate compact in the Southern states to encourage cooperative programs among the institutions of higher education in the member states. It has had a long record of conducting and sponsoring important research. In 1972 its research efforts were, in part, directed to studies of the financial plight of postsecondary education; the special problems of black students and black institutions; and curricular innovation.

The Western Instate Commission on Higher Education (WICHE) is an interstate compact agency for the Rocky Mountain states. Its programs are, in part, regionally oriented in such fields as non-traditional studies, nursing, health education and mental health. Its National Center for Higher Education Management Systems (NCHEMS) is concerned with issues of institutional management on a national scale. In this connection it is currently developing cost-funding principles to be used by institutions of higher education and is also engaged in studying the problems of developing outcomes data for postsecondary education.

L. The Educational Associations[1]

The National Center for Higher Education, No. 1, Dupont Circle, Washington, houses about forty of the educational associations which represent

[1]For a complete list of postsecondary educational associations, see Encyclopedia of Associations. Fish, Margot, Gale Research Co., Detroit, 1972.

various components of postsecondary education either institutionally or by categories of function or personnel. The National Center publishes a descriptive brochure of the organizations which it houses.

The American Council on Education is the central body representing all of non-profit higher education. It manages the National Center and on occasion serves as the spokesman for higher education on national issues. Currently, the ACE is reorganizing its research activities to place more emphasis on policy research and on the development of a capability to respond rapidly to issues requiring facts and judgments from the higher education community.

Many of the associations at the National Center engage in research and play a role in the coordination and dissemination of research results. For example, the Association of American Universities has particularly interested itself in trends in the production of doctorates. The Council of Graduate Schools in the United States has conducted studies on the costs of graduate education.

A number of educational associations are not located in the National Center. For example, the National Education Association, which is primarily oriented to education below the postsecondary level, has its own headquarters elsewhere in Washington. The Association of Independent Colleges and Schools is the organization representing accredited proprietary colleges and schools. The Association for Equal Opportunity in Higher Education represents black institutions. The Association of American Colleges speaks for the nation's liberal arts colleges. These,

and perhaps a dozen other important associations, maintain offices outside of the National Center, but in Washington.

M. Non-Profit Research Institutes

A number of non-profit research institutes, some affiliated with universities and others wholly independent, or with special relationships to government, are the locus of important research on education. Perhaps of most significance to NIE at present is the Rand Corporation, which undertook the development of a proposed plan before NIE came into being. Rand is currently preparing a volume on future educational research needs and priorities, including needs in postsecondary education which should be a seminal report for NIE.

Two university-related research institutes which have made substantial contributions to educational research are the Stanford Research Institute (SRI) and the Educational Policy Research Center (EPRC) of the Syracuse University Research Corporation. SRI has prepared planning studies for NIE. EPRC, while it has generally concerned itself with education below the postsecondary level, has recently done a study for NIE on career education and is currently engaged in NIE-supported research on adult education.

The Brookings Instutition of Washington is perhaps the best known of the independent, non-profit institutes. It has undertaken a wide variety of studies related to postsecondary education, including ones concerned with the impact of Federal science policies on higher education; the financing of education; and accreditation policies and practices.

The Educational Testing Service of Princeton, N. J., serves as the research arm of the College Entrance Examination Board. Its principal function is to provide measurement services for education and in this connection it conducts an extensive R & D program. The Graduate Record Examination Board of the ETS has undertaken, with the Council of Graduate Schools of the United States, a number of studies related to graduate schools and graduate enrollments. The ETS has in recent years undertaken an institutional research program for higher education, the Student Institutional Report and the Institutional Goal Inventory.

Recently affiliated with the ETS is the Institute for Educational Development, a formerly independent educational research organization engaged in research on all levels of education.

The College Entrance Examination Board (CEEB) is a non-profit membership educational association that provides tests and other educational services for students, schools, and colleges. Research in postsecondary education is supported by CEEB both through an Office of Research and through contractual arrangements with the Educational Testing Service and other organizations. The CEEB Office of Research, headed by Dr. Warren Willingham, has tended to focus its efforts on problems of students and academic institutions. Recent research has included studies of student mobility and access, and of student transfer among colleges. The Office

periodically conducts a higher education survey and publishes the Source-book for Higher Education. Psychometric research, in support of the CEEB testing program, is contracted to outside research groups.

The Academy for Educational Development of New York and Washington is engaged, among other activities, in applied research on postsecondary institutional management problems.

The American College Testing Program of Iowa City is also concerned with the provision of measurement services to postsecondary education and engages in extensive research to further its objectives. As a relative newcomer it has introduced important fresh perspectives to the measurement field.

N. The Academic Community

It has not been possible during the brief period available for the preparation of this report to explore the resources in academic institutions across the country presently engaged in research on postsecondary education. Certain information is available which suggests the dimensions

of the interest in postsecondary education as a field of advanced training and thus of research. A 1969 survey by the American Association of Higher Education found that there were 86 graduate programs in higher education. Fifty-three of these offered major concentrations at the doctoral level.[1]

An in depth study of leading doctoral programs in postsecondary education is presently being made by Professors Lewis Mayhew and Paul Dressel. The results should be informative for the NIE postsecondary program in terms of current research interests of faculty; extent to which faculties of such programs bring varieties of disciplinary backgrounds to bear on postsecondary education; and relationships of postsecondary programs to research centers concerned with educational research or other relevant research efforts in the university.

The Syracuse University Department of Higher and Postsecondary Education is perhaps not atypical of such departments and programs. It is located in the School of Education but considers itself an all-university department in terms of serving students with a wide variety of interests and discipline backgrounds. It has approximately 90 active students of whom about half are working for a doctorate in postsecondary educational administration. The Syracuse program at the Master's level was long well known for its preparation of men and women to work in the student

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[1]Rogers, J. F. Higher Education as a Field of Study, A.A.H.E. Programs in Higher Education, Washington, D. C., 1969. See Appendix D for a listing by state of the institutions reported.

opportunities for students, and through teaching contributions from the EPRC staff, than was formerly the case.

O. Special Commissions and Study Groups

Postsecondary education in total, or in selected aspects, has been the subject of important studies by special commission and study groups. The work of some of these groups is still in progress. The more important of such recent or current efforts are noted here.

The Carnegie Commission on Higher Education is financed by the Carnegie Foundation for the Advancement of Teaching and the Carnegie Corporation of New York. Under the direction of Clark Kerr, it has produced about twenty Commission Reports dealing with such issues as the financing of higher education, governance, manpower, governmental relations to higher education, minorities, curricula innovation, and goals and purposes. The Commission has also sponsored about fifty research studies and made available approximately thirty reports of articles and speeches derived from its studies. Its basic objective has been to shed light on all the currently important issues affecting higher education and to develop positions, through the deliberations of its distinguished members, which may inform and influence policy and practice.

A successor organization to the Carnegie Commission is currently being formed to continue to do research on higher education, presumably on a permanent basis.

The National Commission on the Financing of Post-Secondary Education was provided for under the Higher Education Amendments of 1972. The Com-

personnel field. Because of the changing needs on campuses, and the interests of the present faculty, a merger of the two fields of student personnel and postsecondary education administration has been effected. Most students during their tenure are exposed to the practicalities of university administration through internships in many of the management offices across the campus. A group of about eight core courses are offered by the Department. The student determines the remainder of his program through making selections of courses elsewhere in the Department, the School of Education, the Maxwell School of Public Affairs or other schools on the campus.

The ten faculty members of the Department, several of whom have part-time appointments, represent in their backgrounds political science, psychology and varieties of specialties in education including administration, evaluation, student personnel, and institutional research. Research interests of the faculty reflect these differing backgrounds. A substantial emphasis in research has been on the college student and his fit in the academic environment. Attention has also been directed to the roles of the constituencies in the academic community. A growing emphasis in recent years has been on the interrelationships between governments and postsecondary education.

The Department is separate from the Educational Policy Research Center (EPRC) (affiliated with the Syracuse University Research Corporation). EPRC is increasingly engaged in research on postsecondary education. As a result there is now closer collaboration, through research

mission's Report to the President and the Congress is due in December, 1973. The scope of the Report, as presently indicated, will include consideration of the objectives of postsecondary education, the development of an analytical framework, a review of current funding programs from all sources, an evaluation of these programs, an appraisal of alternative funding approaches, and findings and recommendations. The Report will also consider costing and financial reporting procedures and will attempt to assess the financial distress situation in postsecondary education.

The Commission has undertaken some unique studies, e.g., into the finances of proprietary institutions, and its reports will undoubtedly be a source of significant, fresh data with respect to postsecondary education. A special report on ongoing research needs in the area of its inquiry will be of particular interest to NIE.

The Newman Task Force, No. I, was commissioned by Secretary Robert Finch of HEW. Its "Report on Higher Education" published in 1971 was a wide-ranging criticism of the decline of diversity in higher education and of the failure of the existing system to respond to minority needs and to the interests of women. There was also criticism of the "credentials monopoly" and of many other aspects of the current higher education scene. While the reactions from leaders of established higher education were not initially favorable, it was subsequently recognized that Newman and his group had correctly addressed a number of major problems.

The Second Newman Task Force has as its goal a statement on national policy and higher education. Its reports, which are to be completed in the near future, will cover the following issues: data problems in post-secondary education; graduate education; a proposed G.I. bill for community service; external degrees and proficiency testing; accreditation; governance; teacher education; technology; and the Federal role. Three reports were completed in draft by late summer, 1973: Data and Decision-Making; A G.I. Bill for Community Service; and The Federal Role.

Both the first and second Newman Reports, on the basis of present evidence, contain much background material and many ideas which will be useful as the NIE postsecondary program develops. Newman sees the support of R & D as one of the important Federal responsibilities for postsecondary education.

The Commission on Non-Traditional Study (Samuel B. Gould, Chairman) issued its final draft report in January, 1973, entitled Diversity by Design. The Commission worked under the auspices of the Educational Testing Service and College Entrance Examination Board, with support from the Carnegie Commission of New York and the Educational Foundation of America.

After making a wide-ranging survey of the burgeoning approaches to non-traditional postsecondary education, the Commission identified several especially important measures which should be pursued. These include, among others: shifting emphasis in colleges and universities from degree-granting to service to the learner; reorienting faculty, especially through

faculty in-service development efforts; widening the use of educational technology; the creation of new agencies to improve access to information on non-traditional studies, to perform guidance and counseling services, and to aid in credentially student achievement; developing new evaluative tools; and encouraging collaboration among all classes of educational and community learning resources. The Commission Report noted:

> "Support of these areas first for planning and then for action, today seems a more reasonable possibility than ever before. So far as the federal government is concerned the emergence of the National Institute for Education and . . . /the/ HEW Fund for the Improvement of Post-Secondary Education . . . could mark the beginning of intensive national efforts to explore and support such needs."

The Commission's Report, a number of the publications which have emerged from its various investigations, and many of the individuals associated with its efforts, all represent important resources for the NIE post-secondary program as it evolves.

The Commission on Post-Secondary Education in Ontario completed its work in 1972 and published a draft report for public consideration. This was succeeded by a final Report, "The Learning Society," also published in 1972. These documents are useful to NIE planning for postsecondary education in that they represent views and present ideas which are supportive of the broad approaches envisioned for the NIE program. Specific structural and financing recommendations are less relevant, of course, since they are offered in the Canadian context.

P. The Private Foundations

The support of research on postsecondary education by private founda-

tions is presently more substantial than that from any other quarter. The amount is not known (the National Commission on Financing Post-Secondary Education may develop estimates) and is not readily ascertainable. The private foundations typically report their allocations for postsecondary education in total program terms; some funds are for institutional support, some for experimental and demonstration programs, and some for research.

A very large number of private foundations indicate that higher or postsecondary education represents an area of program interest.[1] The long-established foundations are well known for their attention to higher education, and names such as Carnegie, Ford, Rockefeller, Sloan, Kellogg, Russell Sage, and Mellon are familiar in academic circles.

The extent to which the private foundations coordinate their research program emphases with one another and with government programs is unknown. One knowledgeable officer of a major foundation believes that consultation and coordination are on the decline and that this may pose a major challenge to the NIE as it moves into a substantial program of support for postsecondary research. Certainly means will need to be devised for bringing to bear on the NIE program the perspectives of private foundation officials, many of whom have had long experience is assessing research needs and opportunities in higher education.

Illustrative of private foundation work on postsecondary education are the following brief notes on the Ford Foundation and the Russell Sage Foundation, drawn from their 1972 Annual Reports.

[1] The Foundation Directory, prepared by the Foundation Center, Marianna Lewis (ed.) and Patricia Bowers (asst. ed.), New York: Columbia University Press, 1971.

The Ford Foundation. The Division of Education and Research accounted for 18.8% of total foundation expenditures during 1972, or $41,093,740. Of this, 69.3%, or $28,479,632, was allocated to higher education and research, while the remaining monies went to education below the college level. The foundation has five priorities in higher education, the major one of which is an effort to expand higher education opportunity to racial and cultural minorities. This will account for nearly 80% of the higher education budget over the next six years. The program has three thrusts: 1) major developmental grants to selected, traditionally black, private colleges; 2) grants to institutions serving other underrepresented ethnic groups in higher education; and 3) graduate fellowships and graduate scholarships to minority group members. Additionally, post-doctoral fellowships are offered in support of scholarship aimed at strengthening ethnic study programs.

Beyond this central focus, funds were directed to supporting: undergraduate innovation; doctoral studies in the humanities and social sciences; financing and management of colleges and universities (including research on the income contingent loan concept of college financing); European universities to assist in modernization of teaching and research programs and the expansion of international contacts. Beyond these priorities, the foundation has continued support on the interaction of federal and state policies regarding higher education.

Russell Sage Foundation. The Russell Sage Foundation is a general purpose foundation which supports research on higher education as one of

its priorities. Its support fails into three areas:

First, are studies related to the status of women and minorities in American society. Within this category, the foundation has supported work on the role of women in higher education and a study of the educational needs of Puerto Rican youth.

Second, the foundation supports research on occupations and professions including a study of career patterns of university administrators. It has provided partial support to the Board of Human Resources to assist in establishing a panel on the benefits of higher education and a panel to look at patterns of career choice among students.

Third, the foundation supports special studies in education, e.g., record-keeping in higher education, and a revision of Standards for Educational and Psychological Tests and Manual.

Q. Government, Industrial and Labor Organization Educational Activities

Government, industry and organized labor have engaged in varieties of mid-career, work study and continuing education activities. Many of these endeavors are undoubtedly known to the NIE staff concerned with career education.

While it has not been possible to explore this area, there is very probably substantial experience of relevance to the view of postsecondary education as a lifelong learning process. An HEW 1966 study on "University-Sponsored Executive Development Programs in the Public Service"[1] indicated some of the pertinent research literature as of that time and suggested

[1] OE, 56023, 1966

areas of needed research and experimentation. Other sources of information are the U. S. Civil Service Commission; the headquarters offices of the major labor federations and unions; the American Management Association; the Association of Industrial Training Programs; and the American Association of Training and Development, Madison, Wisconsin.

R. Foreign Postsecondary Research

The value of being informed about research on postsecondary education in other nations lies, of course, in the possibility of enhancing research insights and practice in this country. Ultimately, such information should be useful in the development of cosmopolitan perspectives on our own practices in postsecondary education.

Although it has not been possible to examine this area, the following may be noted: the British maintain a Register of Research into Higher Education, published biweekly by the Society for Research into Higher Education; a Canadian Inventory of Research in Higher Education is maintained by the Association of Universities and Colleges in Canada and the Canadian Society for the Study of Higher Education, with new projects reported in the Canadian Journal of Higher Education and University Affairs; and the Office of Economic Cooperation and Development (OECD) of UNESCO has published numerous studies on postsecondary education.[1]

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[1] The Education Committee of the OECD focuses on educational planning, policy, resources and overall structural studies; the Center for Educational Research and Innovation (CERI) focuses on educational research, development and innovative needs, including support for demonstrations and experiments in member countries.

IV. SELECTED ISSUES FOR THE NIE POSTSECONDARY RESEARCH PROGRAM

These summary issue statements outline several areas of major potential research activity for the NIE program. They have been identified through discussions with approximately 80 persons, many of whom are affiliated with the organizations referred to in Chapter III, as the types of problems which should be the subject of NIE attention. The views thus elicited were supplemented by reference to the various NIE planning documents, Congressional hearings, and a review of literature on postsecondary education research needs.[1]

Since these issues, in all cases, involve substantial numbers of subissues and frequently bear on work in progress, they must be further studied and analyzed by NIE staff and others in order to identify their researchable components.[2] The approaches to doing this are discussed in Chapter V.

1. Articulation from Secondary to Postsecondary Education. The central problems here relate to how adequately secondary schooling through curricula, counseling and advisory services, and extracurricular educational opportunities opens up to students the range of possibilities which comprise the postsecondary educational scene. This means not only preparation

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[1]Implications for public policy are to be found in all of the issues considered here. It should be stressed, however, that much research is also implied which bears on students, teachers, administrators and institutions.

[2]Two documents which will be of special assistance in the refinement of the issues are: a) a book, presently in preparation by the Rand Corporation, An Agenda for Educational R & D, edited by Roger E. Levien. This will include recommendations for postsecondary research; b) a paper by Jane Hannaway, Stanford University, presently in preparation, which will discuss the major issues in postsecondary education which need to be addressed through research.

for, and advice about, the traditional institutions of higher education, but also the newer, so-called innovative programs, e.g., work-study, external degrees, television educational programs, employer-based programs, etc. It also means that secondary schools should be well informed about proprietary schools and their offerings. Such questions as the following need to be addressed: How adequate is the labor market information which is provided? How much reliance should be placed upon short-term labor market conditions and manpower projections both by Federal agencies as they support postsecondary programs and by institutions as they develop those programs? How much attention is devoted to lifelong learning concepts and opportunities? How are the values of postsecondary education presented in terms of income? in terms of personal fulfillment? in terms of societal benefit?

2. Access to Postsecondary Educational Experience. The central issues here are: a) Do existing institutional arrangements permit reasonable opportunity for postsecondary educational experiences for all those who are interested, on a lifelong learning basis (from the new high school graduate to the scientist or professional wanting to be updated in his field)? and b) How can the obstacles to individual access to these educational experiences be reduced?

Issues under a) above relate to the need to create new institutional forms and new institutions and to reorient existing patterns and programs.

Issues under b) relate to costs of postsecondary education to the individual student and his ability to pay; cultural constraints and their

alleviation; modes of student evaluation (open admissions, board scores, credentialing experience, etc.); quality of advisory services for students; provision of basic skills; employer policies, etc. (For specific ideas related to these issues see NIE Planning Document 103, pp. 24, 36, 51 ff., 59, and 146.)

3. Institutional Evaluation. In a society seeking to create the infrastructure for lifelong learning opportunities at the postsecondary level and where public and private control, public and private funding, and non-profit and profit-making governance are interwoven into the system, how satisfactory are our present modes of evaluation (e.g., through regional or other accrediting associations; through professional societies; through Federal agency determination of eligibility for funding; etc.)? What values are elevated by existing evaluation procedures and standards? Should these be modified? Does a system in flux need new approaches to protect the student and the public interest without deterring change and innovation? (See NIE Planning Document 103, pp. 146-7.)

4. Ability to Innovate and Change. This capability is crucial to the new technological and social forces which are rapidly modifying and expanding our concepts of postsecondary education. Traditional higher education has been noted for its conservatism. Much more needs to be known about the conditions under which innovation occurs; the roles of governing bodies; administrators; faculty; students; external forces; in a variety of institutional settings. For example, the creative work begun

by some sociologists and psychologists into the nature of "innovative personalities" vs. "traditionalist personalities" in higher education needs to be extended.

5. Outcomes. The outcomes for various types of institutions, traditional and non-traditional, as measured against institutional goals, client goals, teacher goals, and user goals, should be appraised. Involved here are, among others, issues of credentialism; the transferability of knowledge; inter-institutional cooperative outputs; all types of postsecondary education including vocational and proprietary; teaching-learning theory; etc.

Of importance to the study of outputs is the ongoing work of WICHE-NCHEMS, e.g., Technical Report 40, "An Introduction to the Identification and Uses of Higher Education Outcome Information"; the work of the Office of Education National Center for Educational Statistics, e.g., "Indicators of Educational Outcome, Fall, 1972"; and the work of the National Science Board, e.g., "Science Indicators, 1972".

6. Manpower Planning. The adequacy and timeliness of much essential manpower data related to higher education has been the subject of intense criticism for a number of years. The HEGIS data from the Office of Education has not generally been available soon enough to be operationally useful, although there has been recent improvement in this situation.

With the widening acceptance of the view that postsecondary education involves lifelong learning in varieties of institutions, some of which have not previously been recognized, e.g., proprietary colleges and schools, new

manpower data problems are posed. Sufficient information on the corpus of institutions which make up the postsecondary education community is not available. More useful data is becoming available, however, on faculties, students, finances and other attributes which are contributory to analyses of manpower trends.

In terms of forecasting, much still must be done to develop refined assessments of the future requirements of users of the highly educated, namely, governments, industry, and the components of the academic-intellectual community itself. Such information is needed by meaningful categories of skills, disciplines and professions to avoid erroneous public policy decisions and misjudgments on the part of academic institutions and their clients.

Little is known about the desires of citizens for lifelong learning opportunities within institutional settings. Some suggestive evidence can be gleaned by looking at the experience of professionals under the Government Employees Training Act of 1958 and at other established mid-career education opportunities. But it is probable that continuing assessments of needs and interests will be called for in order to reflect changing cultural tastes and expectations, as the concept of lifelong learning is more widely adopted.

The allocation of resources and responsibilities for the collection and dissemination of postsecondary manpower data needs examination. Research on methodologies related to data collection and forecasting is also urgently needed.

Some highly specialized issues may also fall within this rubric, e.g., the consequences of early retirement under TIAA-CREF on tenure, institutional finances, and the individual faculty member; and health manpower needs which involve institutions or units other than medical schools.

7. Autonomy and Control. As governments become more heavily involved in funding and other decision-making affecting postsecondary education, and as the institutional forms of postsecondary education change, new questions with regard to autonomy and control are posed. Can the essential characteristics of autonomy be defined? What consequences for institutional autonomy are experienced under varied forms of institutional governance? What is the impact of private philanthropy on institutional autonomy? of alumni? of Federal policies? of state policies? Such questions are relevant not only for different classes of postsecondary institutions but also for the students, faculty, and administrators within them.

What is the meaning of accountability and how does it relate to autonomy? Is accountability different for public and private institutions? For non-profit and profit-making institutions? In relationship to governments? To clients? To faculties?

What are the implications of recent court decisions on autonomy and accountability? Do these suggest changing concepts for the future?

8. The Federal Role. What strategies should guide the Federal government in its policies toward postsecondary education? Should it

play a gap-filling role? a stabilizing role? an innovative and stimulating role? What should its role be vis-a-vis the states? To what extent should it be the basic data source on postsecondary education?

How are Federal policies actually made in the Congress and the Executive agencies? Who are the contributors, from outside government, to the shaping of educational policy? How effective are they?

What are the consequences of selected Federal policies for the various classes of educational institutions, e.g., the emphasis on financing through students rather than institutions, and the effect on public and private universities, liberal arts colleges, junior colleges, and proprietary institutions?

9. The Roles of Institutions. While there is much literature on the appropriate roles of various classes of institutions of higher education some questions are in need of further examination. For example, what kinds of public service functions are now performed by universities, colleges, junior colleges? Can guidelines be developed for future decision-making with regard to such functions?

What are the roles of institutions vis-a-vis state and federal governments in terms of policy-making; training and education; service; research? What are the perceptions of appropriate roles on the part of trustees, administrators, faculty, students? Is it possible to judge the utility of these perceptions?

10. Financing and Management. The extensive work recently and currently under way on the financing of postsecondary education and the growing activity with regard to new and improved management, suggests to some knowledgeable observers (staff of some leading private foundations, for example) that the NIE should play a monitoring role at present in this area. Certainly until the report of the National Commission on the Financing of Post-Secondary Education is completed in December, 1973, and its recommendations for further research are made available, it would appear that NIE should refrain from initiatives on the financing front. It is clear, however, that both research on financing and on management in postsecondary institutions will remain such important subjects, with major policy implications, that NIE should be prepared to make strategic moves in the future.

In addition to the work of the Commission, WICHE-NCHEMS, with NIE and Ford Foundation support, is engaged in important management research. Other organizations such as the Academy for Educational Development are involved in practical management reform which is suggestive for future research.

11. Graduate, Professional and Post-Doctoral Education. Because education at this level is carried on largely within universities, and because in some respects the problems of universities and their component programs or units are unique in the postsecondary spectrum, this area is identified for separate attention. Many of the issues previously noted, such as manpower, financing, evaluation of outcomes, non-traditional or

innovative approaches, access, etc., have their counterparts in graduate and professional education. Indeed, each is of central importance to the future of graduate and professional education. Some of these issues should undoubtedly be dealt with in the graduate-professional education contexts. For example, the articulation from undergraduate to graduate education; the societal relevance and responsibilities of professional education; the non-institutional (university) forms of professional education; the meaning of professionalism in the various disciplines and fields; etc. Other issues are referred to in section H of Chapter III above.

12. Historical, Philosophical, Cross-Cultural, Transnational Studies. The development of a long-term, postsecondary educational research program, with the goal of strengthening, enriching and generally making more effective the postsecondary system, necessitates attention to problems which provide both perspective and depth of understanding. Thus, studies of an historical nature, cross-cultural investigations, and research which reveals the experiences of other nations — and thus assists in illuminating our own — should be encouraged. Philosophical studies, especially when linked to social and natural science research, may be productive of new theoretical formulations.

Such diverse, important issues as social mobility, learning theory, and international education as an aspect of American postsecondary education, should all receive attention under this rubric.

V. METHODS OF IMPLEMENTING THE NIE POSTSECONDARY PROGRAM

The methods proposed in the following pages for the conduct of the NIE postsecondary program deal with advisory, organizational and procedural arrangements. Their implementation in the first and second years of the program is indicated in Chapter VI.

1. Postsecondary Program Advisory Committee. Because of the breadth and probable substantial dimensions of this program it appears desirable to have an advisory committee. This committee would make recommendations on the scope of the program; assist in setting priorities; advise on personnel needed for activities described below; and assist in communicating information about the program to interested individuals outside of NIE.

Two possibilities exist for forming the committee. The NIE Council might wish to name a sub-committee of its members to serve as the Postsecondary Program Advisory Committee. This would have the obvious advantage of keeping the program closely linked to the overall leadership of NIE.

Should the Council decide that the demands on its time are too great, an advisory committee could be formed by inviting a group of outside persons to serve as members. These should be representative of a range of interests, including various institutional types, faculty, students and the public.

2. Ad Hoc Study Panels. To explore in depth the issues which are outlined in Chapter IV, a number of ad hoc study panels should be created.

The panels will be composed of persons engaged in research in the various areas; researchers from disciplines not currently involved but where potentiality for significant contributions exists; and clients or users of the findings, e.g., public officials who may be interested in policy research.

The objective of the panels' efforts would be to establish priorities among research projects in each of the broad issue areas; indicate where current efforts by other organizations seem to preclude NIE initiatives at present; and recommend individuals and institutions which have capabilities to address particular problems.

Some of the panels may be convened for work during the summer of 1974. Others may work intermittently from the time of their appointment.

Each panel should be provided with a background paper which summarizes, insofar as possible, current research in the area of its concern as well as a bibliography of relevant literature. The background papers may be prepared by NIE staff. It seems more likely, however, that they will need to be commissioned by NIE.

Illustrative of the composition of a panel concerned with research on Ability to Innovate and Change might be one composed of a group of sociologists who have written on academic innovation; a psychologist; a writer on innovative personalities in science; and a student critic of academic innovativeness.

The results of the ad hoc panels' work will be used in several ways: as guidance in the development of the programs of the research centers

discussed below; for the establishment of special categories of "field-initiated" grants; for the issuance of R.F.P.'s; for sole source contracting; and for guidance in undertaking in-house NIE research.

3. Interdisciplinary R & D Centers in Postsecondary Education. Approximately half a dozen strong R & D centers should be developed. These may be based in single universities; in consortia of institutions; or in research organizations such as the Brookings Institution.

In order to identify a group of institutions which have the actual and potential resources for high quality interdisciplinary work on issues related to postsecondary education, the NIE should award approximately a dozen planning grants ($15,000 - $25,000). These will permit interested institutions to identify their actual faculty resources and the nature of the research interests of the faculty; the linkages within the institution and the governance arrangements which would obtain for such a center; plans for student involvement; plans for dissemination of research outcomes; etc.

The selection of about six of the strongest applicants for further support would be accomplished by a panel convened for the purpose to work with NIE staff. In the selection, care should be taken to select those institutions where faculty capabilities and interests are thoroughly documented.

The institutions selected as R & D centers should then receive small, general support grants to provide the resources to keep the center together. Funds would be provided for graduate assistants; facilities and

administrative expenses; and ongoing program planning funds.

The centers would not be provided with other "free" funds than the small, general support grants which serve as "glue" money to keep them together. Each center would be expected to develop major proposals reflecting the interests of the faculty associated with it and also reflecting research needs and priorities which have been identified through the work of the ad hoc study panels. This mixing of interests as between faculty of centers and NIE panels will require ready communication between center personnel, NIE staff, and panel members.

Major center support will derive from funding of the proposals which are mutually agreed upon by NIE and the centers. The broad relevance of the center research programs to emphases deemed important to the NIE postsecondary program can thus be assured. Some centers may specialize in a particular area, e.g., governance; others may have diversified research programs.

The center activities should be coordinated with the ongoing, lab-center postsecondary activities. It is assumed that in time these two sets of research efforts will merge into one program.

4. Requests for Proposals (RFP). The device of the RFP should be used extensively by the postsecondary program. In addition to possible "immediate action" items which could be handled through RFP's (see Appendix E), a good many of the researchable problems emerging from the work of the ad hoc panels may become the subject of RFP's. It is assumed that the centers discussed above will also occasionally compete for RFP's.

However, since the centers will have close working relationships with the NIE postsecondary staff it is probable that in the case of some important problems, where capabilities and interests exist in the centers, the NIE will negotiate directly with them rather than going through the RFP procedure.

Since there are a substantial number of graduate programs in higher education (approximately 85), the RFP will be an important source of research funds and, indirectly, of training funds for graduate students, in these programs. And while, at best, very few of these programs will become centers, or parts of centers, their activities need to be encouraged by the NIE.

The RFP can be a means of eliciting the interest of social scientists outside of programs of higher education and of schools of education. This development is urgently needed to improve the quality of educational research.

5. Field-Initiated Research Grants. During the early development of the postsecondary program it appears desirable to use the research-grants approach extensively. This can be done in several ways through: a) "free competition" in the postsecondary area in order to get at totally new ideas; b) specifying a number of the major issues for which proposals will be received; c) indicating discipline-based research for which awards will be made: d) granting small-scale awards to younger faculty; e) granting awards to assist graduate students with doctoral research, under appropriate faculty supervision.

A stipulation of the grants program should be that modest funds be incorporated in all proposals to involve students in the research.

The advice of the Postsecondary Program Advisory Committee should be sought in the development of the research grants program. Depending on the precise nature of the program, panels of reviewers will need to be assembled. Again, the advice of the Advisory Committee can be of assistance.

6. The Sole-Source Contract. It is probable that with the development of the centers, the RFP program, and the field-initiated research grants program it will not be necessary to use the sole-source approach for more than an occasional, very special case of unique research.

7. In-House Conducted Research. One of the objectives of NIE is to have a staff which is both research oriented and is partially engaged in the pursuit of research. Such a staff should create an environment which is attractive to scholars and which is conducive to making wise research judgments. The NIE would be both a center of research and a planner and manager of research programs.

It seems likely, given the extensive planning and management activities projected here for the postsecondary program, that the amount of time initially available for in-house research will be very limited. At a later date, with more positions available, it may be possible to encourage staff to undertake research of their own.

There are at least two alternatives to doing research in-house which can have the same or a similar impact on the climate in the postsecondary

program. One is to attract scholars from the universities for planning and management duties on a part-time basis (e.g., two weeks a month) with NIE sometimes supporting their ongoing research in the home institutions. The second is to recruit scholars for one- or two-year periods of planning and management service with the understanding that they will be given support to pursue their research interests (assuming appropriate evaluation of proposals, etc.) on return to their home institutions. Such arrangements may make the opportunity to work with NIE decidedly attractive to scholars whose long-term commitments are to teaching and research.

8. Coordination and Joint Program Development with Other NIE Units Having Complementary and Associated Interests. NIE is organized, except in the postsecondary area, around issues, and around resources for R & D, rather than by level of education. Therefore, there are bound to be many organizational units with which close collaboration is necessary. To illustrate, those units of the Office of Research and Exploratory Studies which are concerned with curriculum and instruction, with education personnel, with finance, and with governance and organization, are all potentially interested in those issues as they bear on postsecondary education. While at present attention is focused, in those units, on the primary-secondary levels, it will be important for the postsecondary staff to inform and be kept informed of developments of mutual potential concern.

Similarly, the career education activities and plans of the Office of Programmatic Research and Development will have many points of shared interest with postsecondary education.

9. Training and Dissemination Cooperation with NIE Office of R & D Resources. The Office of R & D Resources is a special case. Its concerns with R & D personnel and with dissemination of research results may prove to be more consultative and advisory for the postsecondary program than operational. This may be the case (but clearly the subject of future negotiation) since much of the attention to R & D personnel development in the postsecondary program will be accomplished through providing funds for student assistants for all facets of the program. In this way R & D personnel will be trained "on the research job" so to speak — the most effective means of research training in postsecondary education.

As for dissemination, a special program of coordination and dissemination within the postsecondary program is recommended below. This is proposed because of the uniqueness of the postsecondary agencies for dissemination as compared with primary-secondary education.

10. Coordination and Complementary Program Development with Organizations External to NIE Engaged in Postsecondary R & D and Related Activities. Chapter III above describes most of these organizations. It is evident that the postsecondary staff of NIE must be in frequent consultation with many of them, e.g., the Fund for the Improvement of Post-Secondary Education; the Commission on the Financing of Post-Secondary Education; the successor organization to the Carnegie Commission; the private foundations; the educational associations; etc. To illustrate quite specifically, one of the persistent problems faced by researchers in postsecondary education is the availability of longitudinal data, and support for analysis of the

data when it is available. Both HEGIS and the American Council on Education maintain (the ACE, now, indirectly) longitudinal data. Both organizations have problems with maintenance and with analytical work on the data. The NIE postsecondary staff should work closely with HEGIS and ACE to assist in addressing these problems.

11. Coordination and Dissemination of R & D Research on Postsecondary Education. The uniqueness of the agencies for coordination and dissemination of R & D results in postsecondary education suggests that this should be a specific obligation of the postsecondary staff, at least in terms of planning and monitoring results.

NIE Report No. P103, pp. 16 ff, presents a useful discussion of the elements of a dissemination plan for NIE. Especially significant may be the suggestion to draw on the experience of other government agencies which have developed coordination and dissemination programs, as for example, NSF, NIH, NASA, the Small Business Administration in the Department of Commerce, the Department of Agriculture, etc.

The organizations potentially or currently involved in coordination and dissemination of research and development on postsecondary education are the professional educational associations;[1] the Educational Periodicals and Serials Relating to Higher Education;[2] and the Erie Clearinghouses.[2] Working with these, and guided by the experience of other government

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[1] See Chapter III. L. above.

[2] See Appendix C, Bibliography.

agencies, it is probable that a more complete and effective coordination and dissemination system can be launched within a year's time.

12. Sources of Guidance in Establishing Program Priorities. The complexity of the interests to be considered in developing the postsecondary program will very probably preclude rigor in setting priorities. The well-tuned judgments of staff, augmented by outside expertise, are likely to be governing. The following sources of guidance suggest the range of inputs which will be called for to produce such judgments:

A. Positions of the NIE Council. As the Council proceeds to clarify and elaborate its role it is certain to make broad determinations which will set priorities among program areas and which may also have intraprogram implications.

B. NIE Inhouse-Determined Interests. These may derive from two principal sources: a) the Director, Associate Director and senior staff (e.g., emphasis in program development on strong inputs from the NIE staff since it is in a position to generate national perspectives in contrast to the possibly narrower perspectives of individual investigators in the field); and b) priority needs signalled by developments in other parts of the NIE, e.g., Career Education, Task Force on Technology, etc.

C. Administration and NEW Secretarial Viewpoints. These are likely to be expressed in very broad terms, e.g., given the uncertainties of the supply-demand picture, a disinclination to make heavy investments in the development of research-oriented Ph.D.'s through special fellowship programs.

D. Congressional Expectations. The tenor of Congressional thinking about NIE, and the priority implications involved, may be derived from at least four sources: a) Congressional hearings, e.g., To Establish a National Institute of Education, Hearings Before the Select Subcommittee on Education of the Committee on Education and Labor, H.R., 92nd Congress, First Session on H.R. 33, H.R. 3606, and other Related Bills; Oversight Hearings on National Institute of Education, Hearing Before the Select Subcommittee on Education of the Committee on Education and Labor, H.R., 93rd Congress, First Session, Feb. 6, 1973; b) The Congressional Record, e.g., Sept. 27, 1972, on the Nomination of Sidney P. Marland, Jr., to be Assistant Secretary of HEW for Education; c) Speeches of Congressmen and Senators, e.g., "National Institute of Education May be Best Hope for Revolution," Congressman John Brademas, College and University Business, July, 1972; and d) interviews with relevant Congressmen, Senators and their staffs, some of whom have very specific expectations about NIE.

E. NIE Planning Documents, Special Reports and Study Groups Contain Numerous Priority Suggestions. For example, NIE Planning Report No. P101, on page 14 lists Criteria for Program Selection; Report No. P102 on page 88 lists Criteria for Program Selection and on page 146 discusses NIE Priorities; and Report No. P103, page 65 ff. discusses Unbundling Higher Education and the strategies and specific measures to achieve this goal.

F. Special Commissions and Study Groups Outside of NIE, e.g., the Second Newman Report; the Commission on Financing Post-Secondary

Education; the Gould Commission on Non-traditional Study; the Carnegie Commission publications, etc. The Commissions and study groups have, in a number of instances, indicated priority problems requiring future study. In some cases their reports are not complete as of this writing (the Commission on Financing Post-Secondary Education). Moves by the NIE in the areas of concern to such groups as the Commission on Financing should be deferred until there has been an opportunity to appraise the results of their work.

G. The Postsecondary Educational Community. Research ideas warrenting priority attention may come from individual investigators, through the educational associations on behalf of their clientels, or through the literature of postsecondary education. It has been suggested elsewhere in this report that the large number of proposals received by NIE in response to its Field-Initiated Studies program, if analyzed in terms of subject matter content, would indicate the current research interests in postsecondary education of investigators across the country and might offer guidance on subject areas warrenting priority attention.

H. The Mutual Needs and Interests of the NIE, the Office of Education and the Fund for the Improvement of Post-Secondary Education. While the independence of NIE from OE and the Fund is established under the authorizing legislation of 1972, it is probable that concerns and responsibilities of all three organizations may come into juxtaposition on selected issues to dictate priorities. For example, the maintenance of a data bank on postsecondary education is a task performed by OE's

Higher Education General Information Survey in the National Center for Educational Statistics. HEGIS has not always been able to supply timely, relevant information vital both to the postsecondary research community and to experimentors and practitioners in institutions of postsecondary education. Assistance to the HEGIS operation might be seen as having a high priority.

With regard to the Fund, it appears desirable that complementary working relationships be established, both as a means of assuring Congressional support to the two organizations, and to clarify for the academic world at large their respective roles.

I. The Lab-Center Programs. Ongoing postsecondary activities in these programs may involve commitments by the NIE which will, in effect, set some priorities.

VI. THE PROGRAM, BUDGET AND STAFF

A. The Program

First Year

1. Recruitment of Program Director (this is discussed in more detail below under Staff).

2. Appointment of Postsecondary Advisory Committee (see Chapter V.1.).

3. Selection of professional staff (also discussed below under Staff).

4. Development of background papers on issues discussed in Chapter IV above either by NIE postsecondary staff or under contract arrangements (see Chapter V.2.).

5. The selection and inauguration of ad hoc study panels to receive background papers and prepare proposals and recommendations on issues and subissues to be addressed through the Program's various activities (see Chapter V.2.).

6. Announcement of interdisciplinary R & D Postsecondary Centers program and award of approximately a dozen planning grants (see Chapter V.3.).

7. Inauguration of "immediate action" program through R.F.P.'s, sole source contracting, or other methods (see Appendix E).

8. Development of field-initiated grants program for postsecondary education, including a combination of "non-directed" proposals submitted by scholars in selected social science disciplines; proposals from younger scholars; and proposals from doctoral candidates (see Chapter V.5.).

9. In-house NIE coordination and joint program development (see Chapter V.8.).

10. Development of a program of postsecondary R & D coordination and

dissemination, working with existing dissemination groups, professional societies, etc. (see Chapter V.9.-10.).

11. Coordination and complementary program planning with the organizations external to NIE (see Chapter III and Chapter V.10.).

Second Year

1. Review of ad hoc study panel reports. Determination of methods to be used in pursuing the research programs emerging from NIE staff deliberations on the contents of these reports, e.g., R.F.P.'s; support of selected projects through R & D centers; support through field-initiated studies; collaborative support through joint efforts with interested in-house NIE units or through external organizations. Inauguration of research related to "issues."

2. Review of proposals coming from potential R & D Centers. Award of six sustaining grants. Receipt and review of research proposals coming from Centers.

3. Continued broad supervision of "immediate action" program.

4. Continuation and further development of field-initiated postsecondary R & D grants program.

5. Internal (NIE) and external coordination and joint program planning and development.

6. Maintenance and development of postsecondary R & D coordination and dissemination program.

7. Initiation of in-house NIE postsecondary research activities, depending on staff capabilities and interests.

B. The Budget*

First Year

Advisory Committee, Program Director, five professionals, supporting staff, five graduate assistants or interns	$ 300,000
Ad hoc panels, background papers, graduate assistants (estimated on basis of seven panels)	280,000
Planning grants to twelve universities	300,000
Program of postsecondary R & D coordination and dissemination	1,000,000
Continuation of existing lab-center programs	2,000,000
Field-initiated research grants program	3,000,000
"Immediate action" projects	1,000,000
TOTAL: First Year Program	$ 7,880,000

Second Year

Advisory Committee, Program Director, seven professionals, supporting staff, five graduate assistants or interns	$ 380,000
Ad hoc panels, graduate assistants (estimated on basis of four panels continuing and three new ones)	200,000
Sustaining grants to six university centers	240,000
Project support to six university centers	2,100,000
Continuation of program of postsecondary R & D coordination and dissemination	800,000
Continuation and merging of existing lab-centers with new university center program	1,500,000
Field-initiated research grants program	3,500,000
Completion of "immediate action" program	250,000
RFP's and sole source contracts on important major issues identified by ad hoc panels	2,000,000
TOTAL: Second Year Program	$10,970,000

*Includes funds for graduate assistants in all appropriate cases when not otherwise specifically indicated.

C. The Staff

The first-year professional staff would consist of the following:

1. Program Director: to provide overall leadership to the program; to be principal spokesman for the program both in internal NIE coordination and negotiation and in outside representation.

Qualifications of the Director. The Program Director should have the following general qualifications:

-- Be in accord with the concept that the postsecondary R & D program is concerned with lifelong learning for all persons who are beyond the secondary level (by virtue of training or experience) within appropriately credentialed institutional settings.

-- Be broadly grounded in the research methods of the social sciences.

-- Be widely acquainted with educational leaders in the academic community, government, the foundations, the research institutions, etc.

-- Be familiar with the Federal government and with a general knowledge of Executive-Congressional working relationships.[1]

2. Associate Program Director: to be the principal continuing spokesman for in-house NIE coordination and program development; to serve as staff

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[1]Appendix F contains a position description for the Program Director. It also contains a draft of a proposed advertisement to be placed in the Chronicle of Higher Education and other appropriate publications as a means of aiding the search for a Program Director.

supervisor for the professional staff and to work with the Program Director and staff in launching the "immediate action" program; and to act for the director in his absence.

3. Program Associate - Issues Development: to serve as the individual primarily responsible for background issues papers and establishment of ad hoc study panels.

4. Program Associate - R & D Center programs: to be responsible for the administration of planning grants; the selection and development of centers; and the continuing administration of the existing lab-center programs.

5. Program Associate - Grants program: to be responsible for the development and administration of the field-initiated grants program, working in close collaboration with the Office of Research Grants.

6. Program Associate - R & D coordination and dissemination: working in collaboration with relevant units of the NIE, and with other government agencies and non-governmental organizations, to develop an effective system of postsecondary R & D coordination and dissemination.

7. Pre-doctoral fellows or interns (five or six): to work as assigned on problems related to the overall program.

APPENDIX A

INDIVIDUALS CONSULTED IN PREPARING REPORT

Organization	Name
American Association of Professors of Higher Education	James Wilson
American Council on Education	Alexander Astin
	Stephen Bailey
Association of American Colleges	William Jellema
Association of American Universities	John Crowley
	Charles Kidd
Association of Independent Colleges and Schools	Richard Fulton
Board of Human Resources, National Research Council	Lewis Solmon
Brookings Institution	Robert Hartman
	Harold Orlans
Carnegie Commission on Higher Education	Alan Cartter
Carnegie Corporation of N. Y.	Alden Dunham
	David Robinson
	Richard Sullivan
Chronicle of Higher Education	Cheryl Fields
College Entrance Examination Board	Ron Betts
Council of Graduate Schools in the U. S.	Boyd Page
Educational Policy Research Center, Syracuse University Research Corporation	Thomas Corcoran
	Larry DeWitt
	Thomas Green
	David McEchron
	Warren Ziegler

Organization	Name
Educational Testing Service	Robert Altman
Federal Interagency Committee on Education	George Lane
Ford Foundation	Mariam Chamberlain
	Earl Cheit
	Peter de Janosi
	Harold Howe II
	Edward Meade
	Benjamin Payton
Fromkin Associates	Arnold Fromkin
Fund for the Improvement of Post-secondary Education	Russell Edgerton
	Ray Lewis
	Carl Stoel
Health, Education and Welfare	Martin Corry
	Robert Filep
	Martin Kramer
	Paul Shapiro
House Subcommittee on Education and Labor	Robert Andringa
	William Gaul
	James Harvey
Institute for Educational Development	Samuel Gould
National Board on Graduate Education	David Breneman
	Sharon Bush
	David Drew
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APPENDIX B

METHODOLOGICAL ISSUES AND CURRENT DIRECTIONS OF RESEARCH ON POSTSECONDARY EDUCATION

Postsecondary education is expected now, increasingly, to provide opportunities for a far broader spectrum of citizens, under much more diversified arrangements, than was true even in the quite recent past. This has led to uncertainty and a lack of consensus about the goals and purposes of postsecondary education. Some recent reports, most notably the Carnegie Commission's, The Purposes and Performance of Higher Education in the United States;[1] Eric Ashby's, Any Person, Any Study;[2] and the second report by the Newman task force, Report on Higher Education: The Federal Role;[3] have explored this situation. The Newman task force notes that, "The casualness of the way our society seeks to know its mind about higher education can probably not endure much longer . . . . Recent turmoil has made the public aware that there can be different objectives for higher education, that these objectives can compete with each other, and no one can easily make the claim to 'know best.'"[4] Research is important as it rationalizes and informs the process of choosing among alternative objectives. It cannot make the choices, but it can array the

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[1]Carnegie Commission on Higher Education, The Purposes and Performance of Higher Education in the United States: Toward the Year 2000. New York: McGraw Hill, 1973.

[2]Ashby, Eric. Any Person, Any Study, The Carnegie Commission on Higher Education. New York: McGraw Hill, 1971.

[3]Task Force on Higher Education (Frank Newman, chm.), Report on Higher Education: The Federal Role: Data and Decision Making in Post Secondary Education, preliminary draft, March 1973.

[4]Ibid, p. 4.

costs and the outcomes and consequences of various proposed courses of action.

The research effort of the sixties seemed to lack coherence or unity. In questioning researchers about priorities in social research generally, one well-known scholar has written: "The overall impression given was one of striking out in all directions at once; of the absence of clear and convincing priorities; and a widespread inability to distinguish between the order of knowledge which can and which cannot be obtained by empirical research."[1] The federal involvement in postsecondary education research, more specifically, seemed to follow this pattern. The second Newman task force observed that, "Despite occasional substantive debate over the federal role in a particular concern, no series of major national decisions has shaped the total range of federal programs. The total level of involvement has come about by adding one commitment at a time. Viewed as a whole, federal relationships with higher education constitute a piecemeal approach and a haphazard structure based on ad hoc rationales."[2] Testimony to the Reuss Commission (House Subcommittee investigating the use of social research in federal domestic programs, 1967) was even harsher: "A major deficit of the research funded by federal programs is

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[1]Orlans, Harold. Contracting for Knowledge, Jossey-Bass, San Francisco, 1973. p. 117.

[2]Task Force on Higher Education, op. cit. p. 1.

that it tends to be disparate and unintegrated, noncumulative."[1]

Where major federal efforts have been made, they have often been in support of development efforts. Here, too, difficulty is encountered and federal funds often support random innovation and lack systematic expermentation or review.[2]

In research and development, poor communication among both the agencies supporting research and among researchers themselves has been a problem. Some federal educational laboratories are found unnecessarily to be duplicating the research efforts of others. Recent statistics indicate that 375 different federal agencies support research in postsecondary educational institutions, often unaware of each other's efforts.

In summary, then, the changing purposes of postsecondary education nave heightened the importance of quality research. Increased competition for resources has heightened the urgency. Yet, the recent history of federal involvement in postsecondary educational research suggests lack of unity or coherence. This is the consequence of no clear federal priorities; a failure sometimes to distinguish researchable questions; and poor communication among funding agencies and researchers.

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[1]Reuss, Henry S. (chm.). The Use of Social Research in Federal Domestic Programs. Part I - Federally Financed Social Research—Expenditures, Status and Objectives; Part II - The Adequacy and Usefulness of Federally Financed Research on Major National Social Problems; Part III - The Relations of Private Social Scientists to Federal Programs on National Social Problems; Part IV - Current Issues in the Administration of Federal Social Research. A staff study for the Research and Technical Programs Subcommittee of the Committee on Government Operations, Washington, D. C., 1967, as cited in Orlans, op. cit., p. 104.

[2]Rivlin, Alice, Systematic Thought for Social Action. Washington, D. C. Brookings Institution, 1971.

Several attempts have been made to summarize the research on post-secondary education of the last decade. Inevitably, they are not comprehensive, but they do provide the flavor and direction of efforts over this time span. Of most value are Heckman and Martin's Inventory of Current Research on Higher Education, New York: McGraw Hill, 1968; Hefferlin, Bloom, Gaff, and Longacre, Inventory of Current Research in Post-Secondary Education, 1972, Center for Research and Development in Higher Education, University of California, Berkeley, 1972; Gage, Handbook of Research on Teaching (AERA, 1963); and Travers, Second Handbook of Research on Teaching (AERA, 1973), Chicago: Rand-McNally & Co., 1973. In addition, for the purpose of this report, searches have been made of the ERIC System, the American Council on Education library, and the Syracuse University library to obtain an overview of recent and current postsecondary research.

In general, the categories of research that emerged from all these sources tended to follow the topical outline provided by Heckman and Martin in their 1968 inventory:

Students

- precollege
- transfer
- college environment
- effects of the college experience
- special themes
- values
- student characteristics
- attrition
- socioeconomic factors
- teaching and learning
- alumni
- other studies on students

Faculty

- student-faculty interaction
- faculty-student interaction
- academic specialization
- professional roles

Administrators

- goals, relationships, services, responsibilities

Structures

- multi-institutional studies
- individual institutional studies

Functions

- curriculum-general
- curriculum-specific
- research
- educational technology
- student-personnel services
- serving clientele external to the institution
- other studies on educational functions

Governance

- faculty, student, administrative dimensions of governance

Graduate and Professional Education

- student
- curriculum
- survey studies
- change and direction

Higher Education and the Marketplace

Supply and Demand, Money and Manpower

- General surveys and broad trends
- the economics of higher education
- facilities

While research throughout the decade of the sixties fits into this schema, there was a gradual shift of emphasis and attention among the categories. During the early part of the decade the content was largely on the teaching-learning process itself. Later in the decade attention shifted to the economic and social outcomes of education for the student. Emphasis on the study of education as a discrete process shifted toward the study of education in its social context. More attention began to be directed toward identifying the educational outcomes that provide benefits both to the individual and to the society.

Methodologically, there was a growing sophistication in research design. Three types of educational research can be distinguished. First is that which focuses on the identification of outcomes. Secondly is research aimed at relating inputs to outputs. Third is research directed to understanding the processes that lie between inputs and outputs. While recent research has been generally of the first and second type, there is an increasing movement toward greater complexity in the research undertaken. The development of new statistical and conceptual tools — such as Path Analysis, proposed by both Astin and Feldman — have provided more sophisticated means of data analysis. At the same time, wider use of the computer has permitted an expanded capacity for data handling.

While recognizing the areas of progress, a number of gaps can also be identified. Agreement on basic definitions and procedures necessary for the collection of comparable data from different institutions has not yet been achieved. For instance, of the more than 2,000 pieces of literature

reviewed by Powell and Lampson[1] only 20 were found to contain numerical data relative to graduate education which were deemed informative, and only four contained roughly comparable data (McCarthy and Deener).[2] Data on important aspects of post-secondary education remain uncollected, or where collected, unanalyzed. The recent expansion of interest in post-secondary education outside of traditional higher education has outstripped the research in the area. For example, "Most of the studies of college environments are restricted to four-year colleges. The approximately 1,000 junior colleges in the United States have been for the most part neglected."[3]

The rapid escalation of enrollments in vocational and technical education have resulted in a heavy emphasis on applied research. The issues that are central relate to the prediction of student achievement and the prediction of manpower needs. The identification of basic necessary competancies and transferable basic skills are given high priority. Additionally, the literature reflects an emphasis on the transfer of occupational analysis into instructional objectives and the problems of keeping teachers updated in their fields.

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[1]Powell, John H., and Lampson, Robert D. Elements Related to the Determination of Costs and Benefits of Graduate Education, The Council of Graduate Schools in the United States: Washington, D.C., March 1972.

[2]McCarthy, J. L. and Deener, D. R. The Costs and Benefits of Graduate Education: A Commentary with Recommendations, The Council of Graduate Schools in the United States: Washington, D. C., 1972.

[3]Trent, James W. and Cohen, Arthur M., "Research on Teaching in Higher Education," in Travers, R. M. W. (ed), Second Handbook of Research on Teaching, Chicago: Rand-McNally & Co., 1973, p. 1004.

However, research on vocational, technical, adult, and recurrent education lags behind the need for knowledge in these areas. In addition to clearer definitions and a more solid data-base, there is a need for better social indicators. The Second Newman report notes that "The biggest problem associated with accountability is determining which measures of output are valid indicators of the effectiveness of education."[1]

In designing future research, greater federal support of longitudinal studies is a clear need. A number of past studies have been flawed by their lack of, or inappropriate use of control groups. Kerpelman highlights this problem in reference to the research on student activism of the sixties.[2] Sample size is a recurrent problem. Large studies are hard to replicate. Small studies often sacrifice validity. Orlans offers an additional point: "Small studies can be readily repeatable by intellectual and political rivals whose arguments are then as strongly based on fact as the original investigator's."[3]

Beyond the problems of data collection and analysis and issues of design that have characterized research in recent years, much that has been completed has been marked by ambivalent outcomes. McKeachie, reviewing research on teaching at the college and university level in 1963, found that

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[1]Task Force on Higher Education, op. cit., p. 70.

[2]Kerpelman, Lawrence, Activists and Nonactivists: A Psychological Study of American College Students, New York: Behavioral Publications, 1972.

[3]Orlans, H., op. cit., p. 591.

many studies contradicted or tempered each other.[1] Dubin and Traveggia (1968)[2] re-analyzed the data from 40 studies looking at the comparative advantage of lecture over discussion. They concluded that the studies tended to cancel each other out. Likewise, Chickering (1969) found little intellectual difference between students in flexible and innovative curriculums and students in more traditional curriculums.[3] Trent and Cohen (1973) note that "no substantial relationship between institutional research and curriculum planning can be found.[4] Such ambivalent outcomes have resulted in a lack of stable generalizations in much of educational research.

Where findings are less ambivalent, they may challenge the assumptions and beliefs of large segments of the population. Jencks (1972) found that none of the evidence reviewed for his study suggested that school reform could be expected to bring about significant social changes outside the schools.[5] Likewise, the Newman task force (1973) found that "there is not a similar or even close correlation between grades and test scores and performance beyond the campus."[6] Challenging assumptions is a highly appropriate role for research. It may help to explain the lack of consensus

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[1]McKeachie, W.J. "Research on Teaching at the College and University Level," in Gage, N. L., Handbook of Research on Teaching, Chicago: Rand McNally & Co., 1963, pp. 118 ff.

[2]Dubin, R. and Traveggia, T. C., "The Teaching-Learning Paradox: A Comparative Analysis of College Teaching Methods," Eugene, Oregon: University of Oregon, Center for the Advanced Study of Educational Administration. 1968.

[3]Chickering, A. W. Education and Identity, San Francisco: Jossey-Bass, 1969.

[4]Trent and Cohen, op. cit., pp. 1033.

[5]Jencks, Christopher. Inequality: A Reassessment of the Effect of Family and Schooling in America, New York: Basic Books, Inc., 1972. p. 255.

[6]Task Force on Higher Education, op. cit., pg 20.

about the purposes of postsecondary education and the widespread disenchantment with educational research. Boyer and Michael remarked in 1965 that "This period of research has been more successful in challenging old assumptions regarding the outcomes of college than it has been in establishing new generalizations."[1] The proposition still stands in 1973.

Challenging previous assumptions without replacing them with adequate new generalizations has, however, resulted in uncertainty over the role of research in education. Is it possible for educational research to result in firm, conclusive findings? Do the methodological frailities of educational research suggest that there must be a greater reliance on the social science disciplines? Are the fundamental answers to educational issues to be found essentially in research in the natural sciences? These are important questions to be addressed in the years ahead.

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[1] Boyer, E. L. and Michael, W. B., "Outcomes of College," Review of Educational Research, 1965, 35(4), 277-291.

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EDUCATIONAL PERIODICALS AND SERIALS RELATING TO HIGHER EDUCATION 1)

Abstracts of Instructional Materials in Vocational and Technical Education

Abstracts of Research and Related Materials in Vocational and Technical Education

Adult Education: A Journal of Research and Theory

Adult Education Journal

Alberta Journal of Educational Research

American Junior College

American Educational Research Journal

American Vocational Journal

Australian Educational Index

Australian Journal of Higher Education

Chronicle of Higher Education

College and University Business

College Board Review

College Student Personnel Abstracts

Colorado Journal of Educational Research

Community Education Journal

Comparative Education Review

Current Index to Journals in Education

Education Canada

Education Index

1) Compiled from resources available in libraries of American Council on Education and Syracuse University.

Educational Record

Educational Research

Educational Research Bulletin

Educational Selections from ERIC and NTIS

Educational Technology

Educational Theory

The Graduate Journal

Grant Data Quarterly

Harvard Educational Review

Higher Education

Higher Education and National Affairs

Higher Education Quarterly

Improving College and University Teaching

Journal of College Student Personnel

Journal of Educational Psychology

Journal of Educational Research

Journal of Experimental Education

Journal of Higher Education

Journal of Research and Development in Higher Education

Junior College Journal

Junior College Research Review

Liberal Education

Minerva

NASPA Journal

NAWDC Journal

New Directions for Community Colleges

New Directions for Higher Education

Personnel and Guidance Journal

Rensselaer Review of Graduate Studies

Research in Education

Research Reporter

Review of Educational Research

Sociology of Education

The Southern Journal of Educational Research

Soviet Education

Vocational Guidance Quarterly

ERIC CLEARINGHOUSES [1]

Adult Education
Syracuse University
Syracuse, New York

Counseling and Personnel Services
University of Michigan
Ann Arbor, Michigan

Disadvantaged
Teachers College
Columbia University
New York, New York

Early Childhood Education
University of Illinois
Urbana, Illinois

Educational Management
University of Oregon
Eugene, Oregon

Educational Media and Technology
Stanford University
Stanford, California

Exceptional Children
The Council for Exceptional Children
Arlington, Virginia

Higher Education
George Washington University
Washington, D. C.

Junior Colleges
University of California - at Los Angeles
Los Angeles, California

Languages and Linguistics
Modern Language Association of America
New York, New York

Library and Information Sciences
American Society for Information Science
Washington, D. C.

1) The Educational Resources Information Center (ERIC) of the NIE has Clearinghouses located in universities and other organizations across the country. Each Clearinghouse is responsible for cataloging, indexing and abstracting the current literature of education in the area of its specialty. The data recorded by each Clearinghouse is sent to a central computerized facility from which publications and indexes are produced. A complete document announcement and retrieval service is available to the public.

Reading and Communication Skills
National Council of Teachers of English
Urbana, Illinois

Rural Education and Small Schools
New Mexico State University
Las Cruces, New Mexico

Science, Mathematics and Environmental Education
Ohio State University
Columbus, Ohio

Social Studies/Social Science Education
University of Colorado
Boulder, Colorado

Teacher Education
American Association of Colleges for Teacher Education
Washington, D. C.

Tests, Measurement, and Evaluation
Educational Testing Service
Princeton, New Jersey

Vocational and Technical Education
Ohio State University
Columbus, Ohio

APPENDIX D

INSTITUTIONS RESPONDING TO AMERICAN ASSOCIATION OF HIGHER EDUCATION INQUIRY*

Alabama

Auburn University

Arizona

Arizona State University
University of Arizona

California

Claremont Graduate School
Stanford
Univ. of Calif-Berkeley
Univ. of Calif-L.A.
Univ. of Calif-Santa Barbara
Univ. of Pacific
Univ. of S. California

Colorado

Colorado State University
University of Colorado
University of Denver

Connecticut

University of Connecticut

District of Columbia

American University
Catholic Univ. of America
George Washington University
Georgetown University

Florida

Florida State
University of Florida
University of Miami

Georgia

Emory

Idaho

University of Idaho

Illinois

Illinois State University
Loyola University
Northern Illinois University
Southern Illinois University
Univ. of Illinois at Urbana

Indiana

Ball State
Indiana University
University of Notre Dame

Iowa

Iowa State Univ. of Science & Tech.
University of Iowa

Kentucky

University of Kentucky

*These institutions indicated in 1969 that they offer courses at the doctoral level in higher education.

Louisiana

Louisiana State University

Maine

University of Maine

Maryland

John Hopkins
University of Maryland

Massachusetts

Boston College

Michigan

Michigan State University
University of Michigan
Wayne State
Western Michigan

Minnesota

University of Minnesota

Mississippi

University of Mississippi
University of S. Miss.

Missouri

St. Louis University
University of Mo. at Columbia
University of Mo. at Kansas City

Montana

Montana State University
University of Montana

New Mexico

New Mexico State University
University of New Mexico

New York

Cornell
SUNY-Albany
SUNY-Buffalo
Syracuse University
University of Rochester

North Carolina

Duke

North Dakota

University of N. Dakota

Ohio

Bowling Green State Univ.
Case Western Reserve
Miami State University
Ohio State University
University of Toledo

Oklahoma

Oklahoma State University
University of Oklahoma

Oregon

Oregon State

Pennsylvania

Lehigh University
Penn State
University of Pennsylvania

Tennessee

University of Tennessee

Texas

Baylor
N. Texas State University
Texas A & M
Texas Tech. University
University of Houston
Univ. of Texas at Austin

Utah

University of Utah
Utah State University

Washington

University of Washington

West Virginia

West Virginia University

Wisconsin

Marquette University
University of Wis. at Madison

Wyoming

University of Wyoming

APPENDIX E

RECOMMENDED "IMMEDIATE ACTION" ITEMS FOR NIE POSTSECONDARY PROGRAM

The following suggestions have derived in part from discussions with knowledgeable persons about the desirability of NIE undertaking, in the immediate future, a limited number of significant projects in the post-secondary area. In part they derive from the review of written materials used in connection with the preparation of the foregoing report.

1. Analysis of postsecondary-related, field-initiated proposals and funded projects in FY 1973. This would provide the NIE postsecondary staff with information on the nature of the interests for which researchers across the country have sought support. The data would be valuable in connection with ongoing planning of the postsecondary program.

Under a contract with the NIE, Minnesota Systems Research, Inc., has undertaken a "Conceptual Analysis of Research Proposals." The analysis embraces all the proposals which were supported by the NIE (206) and a sample of approximately 450 of the unfunded proposals. Examination of the analytical instrument suggests that since coding is, among other items, by "characteristics of the population to which the results are likely to be generalized," (Item 9) and educational level is one group of characteristics, it should be possible to identify relevant proposals. The analyses of variables which are permitted by the instrument should provide substantial information about the proposals related to post-secondary education. The Office of Research Grants indicates special analyses for the postsecondary education task force could be arranged.

2. Identification of the issues related to postsecondary education which Congressional staffs believe will need to be the subject of "policy" research in the immediate future. It is widely known that the Congress is critical of the higher education community for its failure to provide timely information in connection with hearings on postsecondary education legislation. The American Council on Education is currently reorganizing its research staff to provide a capability for quick policy research. Given the imminence of attention to postsecondary legislation by the Congress, and also in consideration of Congressional interest in NIE, identification of issues which should be studied by the ACE or others, as an aid to Congressional decision-making, would appear to be highly desirable. Such a study could be undertaken by a university or an independent research institute.

3. Analysis of the projects now being supported by the Fund for the Improvement of Post-Secondary Education for the purpose of determining whether research needs of an ongoing or postproject evaluative nature might be addressed by NIE. Such an investigation would need to be conducted with the approval of the Fund by a competent research-oriented scholar. An analysis of this type could serve as a point of departure in developing mutually productive, ongoing working relationships between the Fund and NIE.

4. The data problem in postsecondary education. It has been suggested that the NIE organize a Commission on Data Needs in Postsecondary

Education with the objective of defining both the nature of needs and the probable loci of responsibility to meet them. The Second Newman Report deals with the data problem in one of its reports, "Data and Decision-Making in Postsecondary Education." This is not viewed in some quarters as an adequate response to the problem. Also of relevance is the report done under the direction of Burton R. Fisher, "A Focused Study on Directions of Development for the O.E. Postsecondary Educational Manpower Statistics Program," prepared for the U. S. Office of Education's Office of Planning, Budgeting and Evaluation, and National Center for Educational Statistics, November, 1972.

5. Graduate Education. Because of the relatively homogeneous character of graduate education, a number of problem areas are widely noted as meriting research attention. The NIE could move quickly, and with a considerable degree of confidence, to address one or more of these problems through such organizations as The National Board on Graduate Education or The Council of Graduate Schools.

6. Organizational areas identified in Chapter III. Several of these are in need of further exploration. For example, what, in fact, are the research and data collection activities of state agencies and boards concerned with higher postsecondary education? What are the research activities and needs of urban Boards of Higher Education? What kinds of research and data-gathering do the Washington-based, postsecondary education associations engage in? These are projects which could readily be handled by graduate students with modest inputs of faculty supervision.

APPENDIX F

POSITION DESCRIPTION FOR PROGRAM DIRECTOR
NIE POSTSECONDARY PROGRAM

The Director of this Program will have overall responsibility for the NIE Postsecondary Program. In this capacity he will take broad leadership to develop a program of research, research coordination and dissemination, and the training of research personnel with a special interest in postsecondary education. In the program development phase the Director will call upon the capabilities of the academic community at large; of interested persons within NIE, elsewhere in the government, in state and local governments, in the private foundations, research institutions, proprietary institutions, labor and business organizations, etc.

In addition to exercising broad planning leadership in the formulation of specific programs and budgets for succeeding years, the Director will participate in staff recruitment and in the implementation of the program.

The Director will also be responsible for inaugurating, at the earliest opportunity, a series of "immediate action" activities which are consistent with the broad objectives of the proposed ongoing Postsecondary Program and which may involve research, data-gathering or other activities for which a high priority clearly exists.

To meet the foregoing responsibilities the Director should be an individual who is:

1. In accord with the view that the NIE Postsecondary Program

should be concerned with lifelong learning for persons beyond the secondary school level (by virtue of training or experience) within appropriately credentialed institutional settings;

2. Broadly grounded in the research methods of the social sciences;

3. Widely acquainted with educational leaders in the academic community, government, the foundations, the research institutions, etc.;

4. Familiar with the federal government and with a general knowledge of Executive-Congressional working relationships.

(Draft Advertisement for Chronicle of Higher Education and Other Publications)

NATIONAL INSTITUTE OF EDUCATION
PROGRAM DIRECTOR, POSTSECONDARY RESEARCH PROGRAM

The individual occupying this position will play a most influential national role in postsecondary education. He will be responsible for the staffing and development of a long-term, multi-million dollar research and development program designed to address virtually all of the major problems in postsecondary education. He will also be responsible for the development of a coordination and dissemination system for R & D on postsecondary education.

Qualifications should include a broad conception of postsecondary education and an awareness of its rapidly changing character; a research record and solid grasp of research in the social sciences; acquaintanceship with educational leaders in the academic community, government, the foundations and research institutions; and a familiarity with the Federal government's operations.

Interested persons should write to the Director, National Institute of Education, Washington, D. C.